# Department of Mathematics

Summary

The Department of Mathematics offers programs of study leading to the Bachelor of Science, Master of Science, and Doctor of Philosophy degrees in mathematics. The faculty consists of 9 full professors, 6 associate professors, 11 assistant professors, and 13 instructors. In this report, we summarize the professional activities of the faculty from 2015 to present. Over this period, we have produced 220 peer-reviewed journal publications, received external funding awards totaling $7,667,699, and awarded 99 B.S. degrees, 24 M.S. degrees, and 23 Ph.D. degrees.

Peer-Review Journal Publications

134
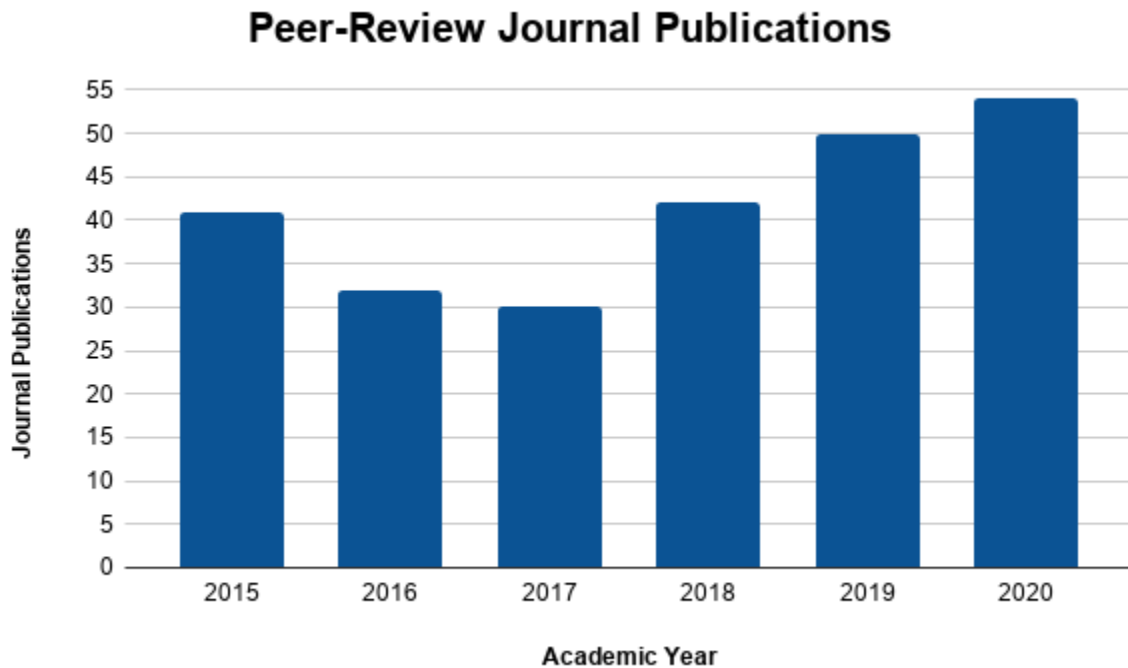
External Funding
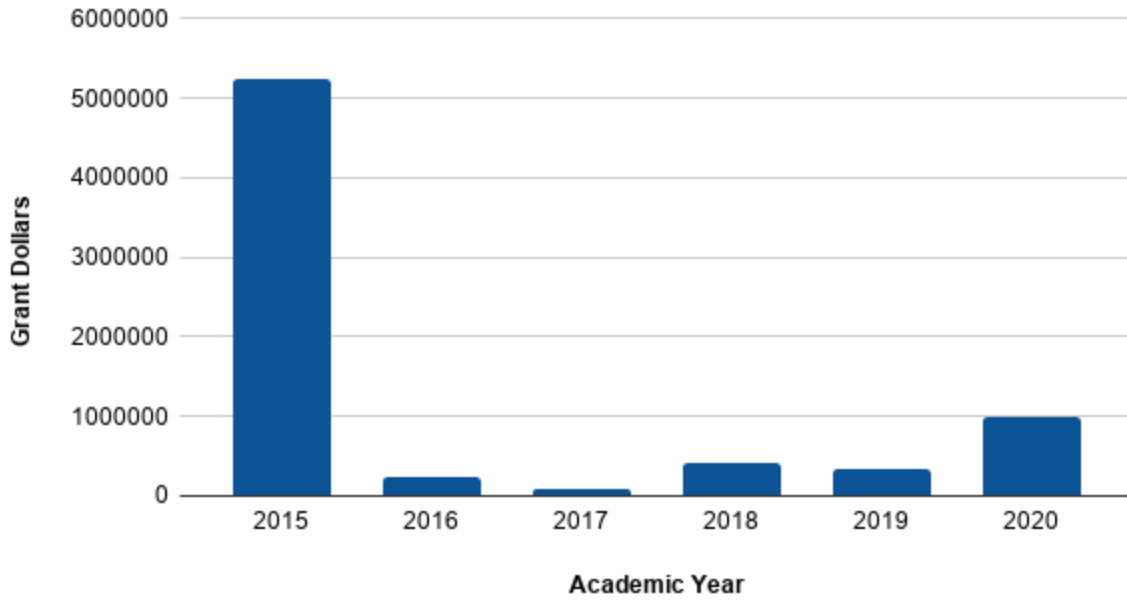
Undergraduate and Graduate Student Enrollment in Mathematics (Majors)
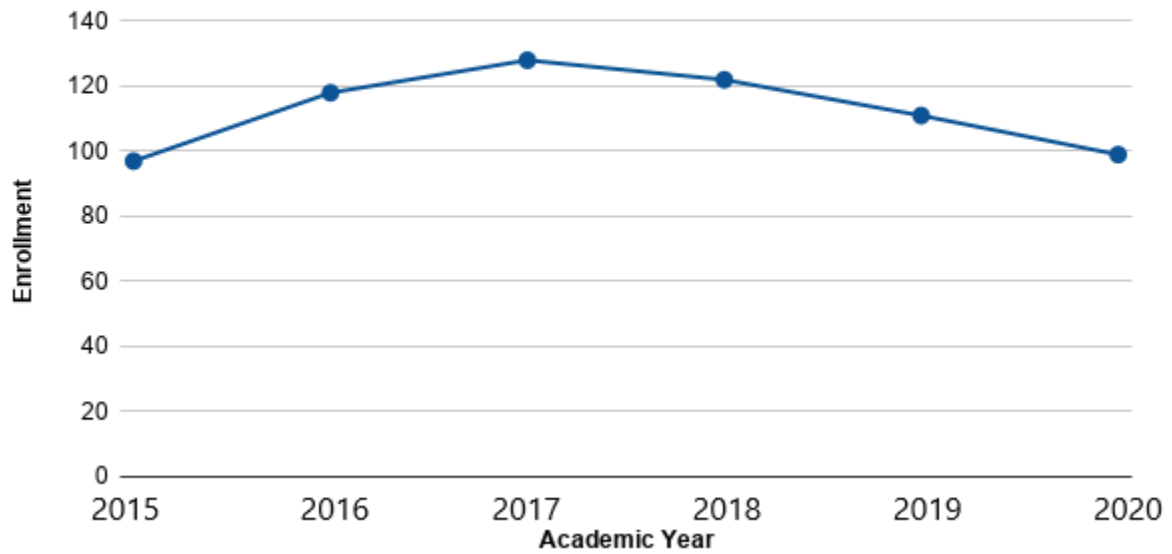
Books Published

- **Krishnamoorthy, K**. (2015). *Handbook of Statistical Distributions with Applications,* 2nd Edition. Boca Raton, FL: CRC Press. doi:10.1201/b19191

Edited Volumes

- **Davis, D.G.,** Henn, H-W., Jardine, J.F., Johnson, M.W. & Rezk, C. (eds). (2019). *Homotopy Theory: Tools and Applications, A Conference in Honor of Paul Goerss's 60th Birthday, July 17-21, 2017, University of Illinois at Urbana-Champaign, Urbana, Illinois*. Contemporary Mathematics, **729**. Providence, RI:American Mathematical Society. doi:10.1090/conm/729
- **Wade, B.A.,** Sheng, Q., Tang, & Wang, Y. (eds). (2018). [Specual Issue] *International Journal of Computer Mathematics*, *Recent Trends in Highly Accurate and Structure-Preserving Numerical Methods for Partial Differential Equations*, **95**(1).
- **Ackleh, A.S.,** Colombo, R.M., Hille, S.C., & Muntean, A. (eds). (2015). [Special Issue] *Mathematical Biosciences and Engineering*, *Mathematical Modeling with Measures*, **12**(2).

Editorship

- **Ackleh, A.S.**, Associate Editor, *Journal of Mathematical Biosciences and Engineering*, 2009-Present.
- **Birkenmeier, G.F.**, Editorial Board, *Quaestiones Mathematicae,* 2017-2018.
- **Birkenmeier, G.F.**, Editorial Board, *Turkish Journal of Mathematics*, 2015-2018.
- **Birkenmeier, G.F.**, Editorial Board Member, *Ege University Journal of the Faculty of Science*, 2013-Present.
- **Birkenmeier, G.F.**, Associate Editor, *Hacettepe Journal of Mathematics and Statistics,* 2008-2018.
- **Birkenmeier, G.F.**, Editorial Board member, *East-West Journal of Mathematics*, 2001-Present.
- **Davis, D.**, Member of the Editorial Board of *Journal of Homotopy and Related Structures*, 2019- present
- **Deng, K.**, Associate Editor. *International Journal for Information & Systems Sciences*, 2006-Present.
- **Kearfott, R.B.**, Associate Editor, *Optimization Letters,* 2019.
- **Kearfott, R.B.**, Managing Editor, *Reliable Computing,* 2008-Present.
- **Kearfott, R.B.**, Editorial Board member, *Optimization Letters,* 2006-Present.
- **Krishnamoorthy, K.**, Associate Editor, *Communications in Statistics-Case Studies, Data Analysis and Applications,* 2019-Present.
- **Krishnamoorthy, K.**, Associate Editor, *Communications in Statistics-Theory and Methods,* 2008-Present.
- **Krishnamoorthy, K.**, Associate Editor, *Communications in Statistics-Simulation and Computation*, 2008-Present.

- **Magidin, A.***,* Associate Editor, *International Electronic Journal of Algebra*, 2011-Present.
- **Vatsala, A.S.**, Editorial Board member, *International Journal of Differential Equations,* 2019-Present.
- **Vatsala, A.S.**, Editorial Board member, *International Journal of Differential Equations,* 2019-present.
- **Vatsala, A.S.**, Editorial Board member, *Communications in Applied Analysis,* 1997-Present.
- **Vatsala, A.S.**, Editorial Board member, *Nonlinear Dynamics and Systems Theory*, 2003-Present.
- **Vatsala, A.S.**, Editorial Board member, *Fractional Dynamic Systems,* 2010-Present.
- **Wade, B.A.**, Associate Editor, *International Journal of Computer Mathematics (IJCM)*, 2019-Present.
- **Wade, B.A.**, Associate Editor, *Frontiers in Applied Mathematics and Statistics*, 2019-Present.
- **Wade, B.A.**, Associate Editor, *Computational and Mathematical Methods (CMM),* 2019-Present.
- **Wade, B.A.**, Editorial Board Member, *International Journal of Computer Mathematics*, 2018
- **Wade, B.A.**, Associate Editor, *Frontiers in Applied Mathematics and Statistics, Analytical and Numerical Methods for Differential Equations and Applications*, 2018.

Journal Papers (Published)

1. **Ackleh, A.S.,** Hossain, I., **Veprauskas, A.** & Zhang, A. (2020). Long-term dynamics of discrete-time predator prey models: stability of equilibria, cycles, and chaos. *Journal of Difference Equations and Applications*, 26, 693-726. doi:10.1080/10236198.2020.1786818
2. **Ackleh, A.S.**, Lyons, R. & Saintier, N. (2020). Finite Difference Schemes for a Structured Population Model in the Space of Measures, *Mathematical Biosciences and Engineering*, **17**, 747-775
3. **Ackleh, A.S.**, N. Saintier, N. & J. Skrzeczkowski, J. (2020). Sensitivity Equations for Measure-Valued Solutions to Transport Equations, *Mathematical Biosciences and Engineering*, **17**, 514-537.
4. **Ackleh, A.S.** & Saintier, N. (2020). Well-posedness for a System of Transport and Diffusion Equations in Measure Spaces, *Journal of Mathematical Analysis and Applications*, **492**, 124397.
5. **Beaulieu, P.,** Grossie, E., Cockrell, L. & Davis, N. (2020). Mathematics Enrichment Camp Experiences Amid the COVID-19 Pandemic: Teacher Voices and Perspectives. *Research Issues in Contemporary Education*, **5**(3), 56-71.
6. **Beaulieu, P.,** Dolenc, N., & Sheppard, P. (2020). Maintaining Scientific Inquiry in Online Education. *Research Issues in Contemporary Education*, **5**(3), 13-25.
7. **Beaulieu, P.**, Dolenc, N. & Sheppard, P. (2020). Using Active Learning and Gameplay in Understanding Species Survival Traits. In: D. Schmidt-Crawford (Ed.), *Proceedings of Society for Information Technology & Teacher Education*

International Conference, 1395-1400). Online: Association for the Advancement of Computing in Education (AACE). Accessible at https://www.learntechlib.org/primary/p/216046/.

8. **Birkenmeier, G.**, Kara, Y. & Tercan, A. (2020). π-Endo Baer Modules. *Communications in Algebra,* **48**, 1132–1149.

9. **Birkenmeier, G**., Anh, P.N. & Van Wyk, L. (2020). Peirce Decompositions, Idempotents and Rings. *Journal of Algebra*, **564**, 247-275.

10. **Birkenmeier, G**. & Davis, D.D. (2020) FI-Extending Generalized Matrix Rings. *Journal of Algebra and Its Applications,* **19**(1), 2050018.

11. **Browne, C.**, Pan, X., Shu, H. & Wang, X.S. (2020). Resonance of Periodic Combination Antiviral Therapy and Intracellular Delays in Virus Model, *Bulletin of Mathematical Biology*, **82** (2), 29.

12. **Browne, C. & Gulbudak, H.** (2020). Infection severity across scales in multi- strain immuno-epidemiological Dengue model structured by host antibody level. *Journal of Mathematical Biology.* doi:10.1007/s00285-020-01480-3

13. **Deng, K**. & Anderson, J.R. (2020). Global solvability for a diffusion model with absorption and memory-driven flux at the boundary, *Z. Angew. Math. Phys.* **71,** 1-15.

14. **Deng, K.**, Webb, G.F. & Wy, Y. (2020). Analysis of age and spatially dependent population model: Application to forest growth. *Nonlinear Analysis Real World Applications,* **56**, 1-23

15. **Hackney, P.,** Robertson, M. & Yau. D. (2020). Modular operads and the nerve theorem. *Advances in Mathematics*, **370**, 107206. doi:10.1016/j.aim.2020.107206

16. **Hackney, P.,** Robertson, M. & Yau, D. (2020). A graphical category for higher modular operads. *Advances in Mathematics*, **365**, 107044. doi:10.1016/j.aim.2020.107044.

17. **Krishnamoorthy, K.**, Sang, Y., & Nguyen, T. (2020). Testing for comparing several two-parameter exponential distributions based on uncensored/censored samples. *Journal of Statistical Theory and Applications*, **19**(2), 248-260.

18. **Krishnamoorthy, K.**, Waguespack, D., & Lee, M. (2020). Tests and Confidence Intervals for the Mean of a Zero-Inflated Poisson Distribution. *American Journal of Mathematical and Management Sciences*, **39**(4), 383-390.

19. **Krishnamoorthy, K**. & Lv, S. (2020) Prediction intervals for hypergeometric distributions. *Communications in Statistics Theory and Methods,* **49**, 1528-1536.

20. **Li, L.** (2020). A split-stepfinite-element method for incompressible Navier-Stokes equations with high-order accuracy up-to the boundary. *Journal of Computational Physics*, **40,**109274.

21. **Lynd, J.,** Glauberman, G., Guralnick, R. & Navarro, G. (2020). Centers of Sylow subgroups and automorphisms. *Israel Journal of Math*, **240**(1) 253- 266.

22. **Ng, P** & Loreaux, J. (2020). Remarks on essential condimension. *Integral Equations and Operator Theory*, **92**(1) Paper No. 4.

23. **Sang, Y.**, Dang, X. & Zhao, Y. (2020). Depth-based Weighted Jackknife Empirical Likelihood for Non-Smooth U-structure Equation. *TEST*, **29**, 573-598.

24. **Sang, Y.**, Krishnamoorthy, K. & Nguyen, T. (2020). Testing for comparing several two-parameter exponential distributions based on uncensored/censored samples. *Journal of Statistical Theory and Applications*, **19**(2), 248-260.

25. **Sang, Y.**, Vanderford, C. & Dang, X. (2020). Two Symmetric and Computational Efficient Gini Correlations. *Dependence Modeling*, **8**, 373-395.

26. **Vatsala, A.S.** & Bai, Y. (2020). Generalized Monotone Method for Nonlinear Caputo Fractional Impulsive Differential Equations. *Nonlinear Dynamics and Systems Theory,* **20**(1), 3-20.

27. **Vatsala, A.S.** & Subedi, S. (2020). Quenching Problem for Two Dimensional Time Caputo Fractional Reaction-Diffusion Equation. *Dynamic Systems and Applications,* **29**, 26-52.

28. **Vatsala, A.S.** & Bai, Y. (2020). Numerical Results for Generalized Monotone Method for Nonlinear Caputo Fractional Impulsive Differential Equations. *Neural, Parallel, and Scientific Computations*, **28**, 19-36.

29. **Vatsala, A.S.** & Bai, Y. (2020) Numerical results for sequential sub hyperbolic equation in one dimensional space. *Mathematics in Engineering, Science and Aerospace (MESA)*,**11**, No. 3, 595-611.

30. **Vatsala, A.S.** & Sambandham, B. (2020). Sequential Caputo versus Nonsequential Caputo Fractional Initial and Boundary Value Problems. *International Journal of Difference Equations*, **15**(2), 529–544.

31. **Wang, X.-S.**, Browne, C., Pan, X. & Shu, H. (2020). Resonance of Periodic Combination Antiviral Therapy and Intracellular Delays in Virus Model, *Bulletin of Mathematical Biology*, *82* (2), 29.

32. **Wang, X.-S.**, Dai, D. & Ismail, M.E.H. (2020). On a Ramanujan type entire function and its zeros. *Journal of Mathematical Analysis and Applications*, **485**, 123856.

33. **Wang, X.-S.**, Li, Y.-T. & Wong, R. (2020). Asymptotics of the Wilson polynomials. *Analysis and Applications*, **18**, 237-270.

34. **Wang, X.-S.**, Long, W., Dai, D. & Li, Y.-T. (2020). Asymptotics of orthogonal polynomials with asymptotic Freud-like weights. *Studies in Applied Mathematics*, **144**, 133-163.

35. **Wang, X.-S.**, Shu, H. & Ma, Z. (2020). Viral diffusion and cell-to-cell transmission: Mathematical analysis and simulation study. *Journal de Mathématiques Pures et Appliquées*, **137**, 290-313.

36. **Wang, X.-S.**, Shu, H., Xu, W. & Wu, X.J. (2020). Complex dynamics in a delay differential equation with two delays in tick growth with diapause. *Journal of Differential Equations* **269**, 10937-10963.

37. **Ackleh, A.S.**, Hossain, Md. I., **Veprauskas, A.** & Zhang, A. (2019). Persistence and stability analysis of discrete-time predator-prey models: A study of population and evolutionary dynamics. *Journal of Difference Equations and Applications***, 25**, 1568-1603.

38. **Ackleh, A.S.** & Miller, R. (2019). A Model for Structured Population Dynamics with Indefinite Growth Rates Coupled with the Environment. *Numerical Methods for Partial Differential Equations*, **35**, 2348-2374.

39. **Ackleh, A.S.**, Banks, J., **Veprauskas, A.**, Vargas R. & and Stark, J. (2019). Environmental Indicators: The Trouble with Surrogates. *Ecotoxicology*, **28**, 62-68.

40. **Ackleh, A.S,** Caswell, H., **Chiquet, R.A.**, Tang T. & **Veprauskas, A.** (2019). Sensitivity Analysis of the Recovery Time for a Population under the Impact of an Environmental Disturbance. *Natural Resource Modeling*, **32**, 1-22.

41. **Birkenmeier, G.** & LeBlanc, R.L. (2019). FI-Extending Hulls of Abelian Groups. *Contributions to Algebra and Geometry*, **60**, 671-678.

42. **Birkenmeier, G.** & Heider, B. (2019). Annihilators and Extensions of Idempotent Generated Ideals. *Communications in Algebra*, **47**, 1348-1375.

43. **Birkenmeier, G.,** Kara, Y. & Tercan, A. (2019). A Survey of Rings Satisfying Annihilator or Extending Conditions on Projection Invariant Ideals. *Springer Proceedings in Mathematics & Statistics,* **277**, 53-65.

44. **Birkenmeier, G.** & Al-Mallah, O.A. (2019). A Classification of Indecomposable Quasi-Frobenius Rings I. *Communications in Algebra*, **47**, 5121-5132.

45. **Browne, C.** & Cheng, C.Y. (2019). Age-structured viral dynamics in a host with multiple compartments. *Mathematical biosciences and engineering: MBE*, **17** (1), 538-574.

46. **Deng, K.** (2019). Asymptotic behavior of an SIR reaction-diffusion model with a linear source. *Discrete and Continuous Dynamical Systems Series B,* **24**, 5945-5957.

47. **Deng, K.** & Huang, Q. (2019). A hybrid parabolic and hyperbolic equation model for a population with separate dispersal and stationary stages: Well-posedness and population persistence. *SIAM Journal on Applied Mathematics,* **79**, 2265-2287.

48. **Gulbudak, H.**, Weitz, J.S., Li, **G.,** Cortez,M., & Whitaker, R. (2019). Viral invasion fitness across a continuum from lysis to latency. *Virus Evolution*, **5**(1), p. vez006

49. **Gulbudak, H.** & Weitz, J. (2019). Heterogeneous Viral Strategies Promote Coexistence in Virus-Microbe System*. Journal of Theoretical Biology*, **462**, 65-84.

50. **Hackney, P.**, Robertson, M. & Yau, D. (2019). Higher Cyclic Operads. *Algebraic & Geometric Topology*, **19**(2), 863-940. doi:10.2140/agt.2019.19.863

51. **Hackney, P.** & Drummond-Cole, G. (2019). A Criterion for Existence of Right-Induced Model Structures, *Bulletin of the London Mathematical Society*, **51**(2), 309-326. https://doi.org/10.1112/blms.12232.

52. **Kim, S**. (2019). The probable error in the hypothesis test of normal means using a small sample. *Communications in Statistics - Theory and Methods.* doi:10.1080/03610926.2019.1703135

53. **Kim, S.** & Peiris, T.B. (2019). Meta Analysis of Regression: a Review and New Approach with Application to Linear-circular Regression Model. *Communication in Statistics: Theory and Methods*. doi:10.1080/03610926.2019.1679183

54. **Kim, S.** & Park, C.J. (2019). An Asymptotic Conditional Test of Independence in Bernoulli Sequences Using the Number of Runs Given the Number of Successes. *Sankhya, A.* doi:10.1007/s13171-019-00176-1

55. **Kim, S**. & Rifat, M.M. (2019). Diagnostic analysis of a circular-circular regression model using asymmetric or asymmetric bi-modal circular errors. *Communication in Statistics: Theory and Methods*. doi:10.1080/03610926.2019.1676448

56. **Koytcheff, R.** (2019). Bott-Taubes–Vassiliev cohomology classes by cut-and-paste topology. *Internat. J. Math,* **30(1**0), 1950047.

57. **Koytcheff, R**. & Volic', I. (2019). Milnor invariants of string links, trivalent trees, and configuration space integrals. *Topology Applications*, **251**, 4769.

58. **Krishnamoorthy, K**. & Weerahandi, S. (2019). A note reconciling ANOVA tests under unequal error variances. *Communications in Statistics – Theory and Methods*, **48**, 689-693.

59. **Krishnamoorthy, K.**, He, Y. & Yu, J. (2019). Testing equality of two normal covariance matrices with monotone missing data. *Communications in Statistics – Theory and Methods*. doi:10.1080/03610926.2019.15914

60. **Krishnamoorthy, K.**, Waguespack, D. & Hoang-Nguyen-Thuy, N. (2019) Confidence Interval Prediction Interval and Tolerance Limits for a Two-Parameter Rayleigh Distribution. *Journal of Applied Statistics*. doi:10.1080/02664763.2019.1634681

61. **Li, L.** & Ji, H. (2019). Numerical methods for thermally stressed shallow shell equations. *Journal of Computational and Applied Mathematics, **362**, 626-652.*

62. **Lynd, J**., Kessar, R., Linckelmann, M., & Semeraro, J. (2019). Weight conjectures for fusion systems. *Advances in Mathematics, **357**, 106825.*

63. **Ng, P.** & Giordano, T. (2019). A relative bicommutant theorem: The stable case of Pedersen's question. *Advances in Mathematics*, **342**, 1-13.

64. **Ng, P.** Kaftal, V. & Zhang, S. (2019). Purely infinite corona algebras. *Journal of Operator Theory*, **81**(2), 481-498.

65. **Ng, P.** & Robin, T. (2019). Functorial properties of Ext(C(X), B) when B is simple with continuous scale. *Journal of Operator Theory*, **81**(2), 481-498.

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69. **Pal, N.** Lim, W.K. & Tanaka, H. (2019). On Second-order Improved Estimation of a Gamma Scale Parameter. *Statistics: A Journal of Theoretical and Applied Statistics, **53**(5), 968-989.*

70. **Robert Gozalez, L**. (2019). Normal subgroups of invertibles and of unitaries in a *C**-algebra. *J. Reine Angew. Math.*, **756**, 285-319.

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73. **Sang, Y.** & Dang, X. (2019) .Empirical likelihood approach for diagonal symmetry. *Statistics and Probability Letters*. doi:10.1016/j.spl.2019.108595

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75. **Vatsala, A.S**., Chellamuthu, V.K. & Sambandham, B. (2019). Numerical Results for Linear Sequential Caputo Fractional Boundary Value Problems. *On line Journal, Mathematics 2019*, **7**, 910. doi:10.3390/math7100910

76. **Vatsala, A.S**. & Bai, Y. (2019). One dimensional Sub-hyperbolic equation via sequential Caputo fractional derivative. [Special Issue] 'Computational and Numerical Methods,' *Journal of Combinatorics Information and Systems Sciences (JCISS)*, **44**, 73-83.

77. **Wang, X.-S.**, Shu, H., Pan, X., & Wu, J. (2019). Traveling waves in epidemic models: non-monotone diffusive systems with non-monotone incidence rates. *Journal of Dynamics and Differential Equations*, **31**, 883-901.

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80. **Wang, X.-S.** & Ismail, M.E.H. (2019). On quasi-orthogonal polynomials: Their differential equations, discriminants and electrostatics. *Journal of Mathematical Analysis and Applications*, **474**, 1178-1197.

81. **Wang, X.-S.** & Huang, X.-M. (2019). Traveling waves of diffusive disease models with time delay and degeneracy. *Mathematical Biosciences and Engineering*, **16,** 2391-2410.

82. **Wang, X.-S.**, Cao, L. & Huang, X.-M. (2019). Asymptotic expansion of orthogonal polynomials via difference equations. *Journal of Approximation Theory,* **239**, 29-50.

83. **Wang, X.-S.**, Hager, W.W., Hou, H., Mohapatra, S. & Rao, A.V. (2019). Convergence rate for a Radau hp collocation method applied to constrained optimal control. *Computational Optimization and Applications,* **74**, 275-314.

84. **Wang, X.-S.**, Dai, D. & Ismail, M.E.H. (2019). Asymptotics of partition functions in a fermionic matrix model and of related q-polynomials. *Studies in Applied Mathematics,* **142**, 91-105.

85. **Wang, X.-S.**, Dai, D. & Ismail, M.E.H. (2019). Doubly infinite Jacobi matrices revisited: Resolvent and spectral measure. *Advances in Mathematics*, **343**, 157-192.

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87. **Birkenmeier, G.F.**, Tercan, A. & Kara, Y. (2018). π-Baer Rings. *Journal of Algebra and Its Applications*, **17**(2). doi:10.1142/S0219498818500299

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89. **Ackleh, A.S.**, Sutton, K.L., Tang, T., & Zhao, L. (2018). A second order finite difference scheme for a variable infection-structured model of *mycobacterium marinum* dynamics in aquatic animals. *Journal of Nonlinear and Variational Analysis*, **2**(2), 177-202. doi:10.23952/jnva.2.2018.2.06

90. **Kim, S.** & Park, C.J. (2018). On the number of unobserved and observed categories and a new generalization. *Brazilian Journal of Probability and Statistics* **32**(2), 309-319. doi:10.1214/16-BJPS344

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94. **Hackney, P.** (2018). Configuration spaces form a Segal semi-dendroidal space. *Higher Structures*, **2**(1) 234-240.

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222. **Vatsala A.S.** & Sambandham B. (2015). Basic Results for Sequential Caputo Fractional Differential Equations. *Mathematics*, **3**, 76-91. doi:10.3390/math3010076

223. Sowmya, M. & **Vatsala, A.S.** (2015). Generalized Iterative Methods for Caputo Fractional Differential Equations via Coupled Lower and Upper Solutions with Superlinear Convergence. *Nonlinear Dynamics and Systems Theory*, **15**(2), 198-208.

224. Marinov, T.T., Marinova, R.S. & **Vatsala, A.S.** (2015). Coefficient identification in Euler-Bernoulli equation from over-posed data. *Neural, Parallel, and Scientific Computations,* **23,** 193-218.

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226. Sambandham, B. & **Vatsala, A.S.** (2015). Numerical Results for Linear Caputo Fractional Differential Equations with Variable Coefficients and Applications. *Neural, Parallel, and Scientific Computations*, **23,** 253-266.

227. Setia, A., Prakash, B., & **Vatsala, A.S.** (2015). Numerical Solution by Fourth Order Fractional Integro-Differential Equation by Using Legendre Wavelets. *Neural, Parallel, and Scientific Computations*, **23,** 377-386.

228. **Vatsala, A.S.**, Sowmya, M., &. Stutson, D.S. (2015). Generalized Monotone Method for Ordinary Caputo Fractional Differential Equations. *Dynamic Systems and Applications*, **24,** 429-438.

229. Szyld, D.B. & **Xue, F.** (2015). Local convergence of Newton-like methods for degenerate eigenvalues of nonlinear eigenproblems. I. Classical algorithms. *Numerische Mathematik*, **129**, 353-381. doi:10.1007/s00211-014-0639-8

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234. **Robert, L.** (2015). Nuclear dimension and sums of commutators. *Indiana University Mathematics Journal*, **64**(2), 559-576. doi:10.1512/iumj.2015.64.5472

Journal Papers (Accepted)

1. **Ackleh, A.S.** & **Veprauskas, A**. Frequency-Dependent Evolution in a Predator-Prey System, *Natural Resource Modeling*.

2. **Ackleh, A.S.** & Saintier, N. Diffusive Limit to a Selection-mutation Equation with small mutation formulated on the space of Measures, *Discrete and Continuous Dynamical Systems Series B.*

3. **Ackleh, A.S.,** Elaydi, S., Livadiotis, G. & **Veprauskas, A.** A continuous-time mathematical model and discrete approximations for the aggregation of amyloid-beta, *Journal of Biological Dynamics.*

4. **Birkenmeier, G. F.** & Kara, K., A Partial Order on Subsets of Baer Bimodules with Applications to C*-modules, *Journal of Algebra and Its Applications*.

5. **Birkenmeier, G. F.,** Kara, Y. & Tercan, A., π-Rickart Rings, *Journal of Algebra and Its Applications.*

6. **Birkenmeier, G**., Kara, Y. & Tercan, A., Quasi-s. Baer and related modules, *Journal of Algebra and Its Applications*.

7. **Browne, C.J. &** Smith, H. Dynamics of Virus and Immune Response in Response in Multi-Epitope Network, *Journal of Mathematical Biology*, DOI 10.1007/s00285-018-1224-z.

8. **Browne, C**., Mavian, C., Paisie, T.K., Alam, M.T., Beau De Rochars, V.M., Nembrini, S., Cash, M.N., Nelson, E.J., Azarian, T., Ali, A., Morris Jr., J.G. & Salemi, M., Toxigenic Vibrio cholerae Evolution and Establishment of Reservoirs in Aquatic Ecosystems, *PNAS*

9. **Chiquet, R. &** Perry, L. Chaos in a Two-stage Discrete Model with Strong Nonlinearities, *Dynamic Systems and Applications.*

10. **Gulbudak, H**. An Immuno-Epidemiological Vector-Host Model with Within-Vector Viral Kinetics, *Journal of Biological Systems.*

11. **Hackney, P.** & Drummond-Cole, G.C. Coextension of scalars in operad theory,

12. **Hackney, P**. & Drummond-Cole, G.C. Dwyer–Kan homotopy theory for cyclic operads. Proceedings of the Edinburgh Mathematical Society

13. **Kearfoot, R.B.,** Guilbeau, J.T., Hossain, Md.I., Karhbet, S.D., Sanusi, T.S. & Zhao, L. "A Review of Computation of Mathematically Rigorous Lower Bounds on Optima of Linear Programs," final manuscript accepted for publication in the *Journal of Global Optimization* on December 8, 2016. See http://link.springer.com/article/10.1007/s10898-016-0489-2.

14. **Kearfott, R.B.,** Castille, J.M. & Tyagi, G. Algorithm for problems with low-dimensional non-convex subspaces, *Optimization Methods and Software.*

15. **Kim, S.** & Park, C.J. Note on the Number of Categories when Sampling from a Multivariate Hypergeometric Population, *Brazilian Journal of Probability and Statistics.*

16. **Koytcheff, R.,** Ismar, R. & Ismar, V. Milnor invariants of string links, trivalent trees, and conguration space integrals. *Topology and Its Applications.*

17. **Magidin, A**. & Kilpack, M. The lattice of algebraic closure operators on an infinite subgroup lattice, *Communications in Algebra.*

18. **Ng, P.**, Kaftal, V. & Zhang, S. Projection decomposition in multiplier algebras. *Mathematische Annalen.*

19. **Ng, P.** & Ruiz,E. On the structure of the projective unitary group of the multiplier algebra of a simple stable nuclear C*-algebra, *Journal of Operator Theory.*

20. **Pal, N.,** Lim, W.K. & Tanaka, H. On Improved Estimation Under Weibull Model, *Journal of Statistical Theory and Practice*, Vol.12, No. 1, 48 – 65, http://dx.doi.org/10.1080/15598608.2017.1305921.

21. **Pal, N.,** Tiensuwan, M. & Unhapipat, S. Bayesian predictive inference for Zero-Inflated Poisson Poisson (ZIP) distribution with applications*, American Journal of Mathematical and Management Sciences*, http:://www.tandfonline.com/doi/full/10.1080/01966324.2017.1380545.

22. **Robert Gonzalez, L.,** Farah, I., Hart, B., Lupini, M., Tikuisis, L., Vignati, A., & Winter,W. The Model Theory of C*-algebras, *Memoirs of the American Mathematical Society*.

23. **Robert Gonzalez, L**. & Santiago, L. A revised augmented Cuntz semigroup, *Math. Scand*.

24. **Sang, Y.** & Yin, P. Model-based Sensitivity Analysis of Barometric Pressure on Cooling Capacity Measurement of Hydronic Room Fan Coil Unit, *Science and Technology for the Built Environment.*

25. **Sutton, K.L**., Zhao, L. & Carter, J. The Estimation of Growth Dynamics for Pomacea maculata from hatchling to adult, *Ecosphere*.

26. **Vatsala, A.S**. & Subedi, S. Blow-up results for one dimensional Caputo fractional reaction diffusion equation, *MATHEMATICS IN ENGINEERING, SCIENCE AND AEROSPACE. MESA*.

27. **Vatsala, A.S.** & Y. Bai. Generalized Monotone Method for Nonlinear Caputo Fractional *Impulsive Differential Equations, Nonlinear Dynamics and Systems Theory.*

28. **Vatsala, A.S.,** Vijesha, V.A., Roya, R. & Chandhinib, G. Bivariate Spectral Method for Nonlinear Integro Differential Equation, *Journal of Integral Equations and Applications*.

29. **Vatsala, A.S.** & Subedi, S. Quenching Problem for Two Dimensional Caputo Time-Fractional Reaction Diffusion Equation, *Dynamic Systems and Applications*.

30. **Wade, B.,** Chen, S., He, Y., & Wu, X. On Deep Matrix Tri-Factorization for Mining Vertex-wise Interactions in Multi-Space Attributed Graphs, Proceedings of SIAM International Conference on Data Mining (SDM20), December, 2019.

31. **Wang, X.-S.**, Zhang, X., Scarabel, F. & Wu, J. Global continuation of periodic oscillations to a diapause rhythm, *Journal of Dynamics and Differential Equations*.

Book Chapters

1. **Beaulieu, P.** (2019). Deepening the Mathematical Knowledge of Middle School Teachers: A Mathematici an's Journey in Strengthening Mathematical Reasoning among Middle School Students with Hidden or Unmet Potential: A Practitioner Text (Eds: P. Sheppard, M. Gallagher), 11-15. Rowman & Littlefield.

2. **Gulbudak, H.**, Blohm, G., Martcheva, M., & Ponciano, J.M., (2019). Modeling Intracellular Replication of Flaviviruses. In: Tabitha Terry (ed). *Mosquitos: Species, Distribution and Disease,* 49-66. Nova Science Publishers.

3. **Birkenmeier, G.F.** & Lee, E. (2018). A survey of intrinsic extensions of rings. In: López-Permouth, S.R., Park, J.K., Rizvi, S.T., Roman, C.S. (eds). *Advances in Rings and Modules, Contemporary Mathematics*, **715**, 69-88. Providence, RI: American Mathematical Society.

4. **Veprauskas, A.,** Clifton, S.M., Davis, C.L., Erwin, S., Hamerlinck, G., Wang, Y., & Gaff, H. (2018). Modeling the Argasid Tick (*Ornithodoros moubata*) Life Cycle. In: Radunskaya, A., Segal, R., Shtylla, B. (eds). *Understanding Complex Biological*

Systems with Mathematics. Association for Women in Mathematics Series, **14**, 63-87. Cham, Switzerland: Springer International. doi:10.1007/978-3-319-98083-6_4

5.   **Magidin, A.**, & Morse, R.F. (2015). Capable p-groups, In: Campbell, C., Quick, M., Robertson, E., & Roney-Dougal, C. (eds). *Groups St Andrews 2013. London Mathematical Society Lecture Note Series*, **422**, 399-427. Cambridge, England: Cambridge University Press. doi:10.1017/CBO9781316227343.026

Conference Papers (Published)

1.   **Veprauskas, A., Ackleh, A.**, Hossain, I. & Zhang, A. (2020) Persistence of a Discrete-Time Predator-Prey Model with Stage-Structure in the Predator, *In Baigent S., Bohner M., Elaydi S. (eds) Progress on Difference Equations and Discrete Dynamical Systems*. *ICDEA 2019*. Springer Proceedings in Mathematics & Statistics, vol 341. Springer, Cham. DOI: 10.1007/978-3-030-60107-2_6.

2.   **Birkenmeier, G.F**. (2018) A survey of intrinsic extensions of rings, Advances in and Modules, (Lee, E. coauthor), Contemporary Mathematics, **715**, (Lopez-Permouth, S.R., Park, J.K., Rizvi, S.T., Roman,C.C.S.; eds), 69-88. Providence: American Mathematical Society.

3.   **Kim, S.** (2018) Regression involving circular variables: overview and a new generalization. Springer Series in Statistics, Platinum Jubilee Conference, Kolkata, India.

4.   **Kim, S.** (2018) Clustering methods for spherical data: an overview and a new generalization. Proceedings of the Pacific Rim Statistical Conference for Big Data, Production Engineering and Statistics

5.   **Lynd, J**. & Henke, E. (2018) Extensions of the Benson-Solomon fusion systems, in Geometric and Topological Aspects of the Representation Theory of Finite Groups, *Springer Proceedings in Mathematics & Statistics*, **242**, 251-268. Cham: Springer.

6.   **Pal, N.** & Thiuthad, P. (2018) Hypothesis Testing on the Location Parameter of a Skew-Normal Distribution (SND) with Application, Recent Advances in Algebra, Numerical Analysis, Applied Analysis and Statistics (Editors: Bris, R., Chang, G.W., Khanh, C.D., Razzaghi, M., Stempak, K., & Toan, P.T.) ITM Web of Conferences Proceedings, International Conference on Mathematics, ICM 2018.

7.   **Vatsala, A.S.** & Bai, Y. (2018) Nonlinear caputo fractional impulsive differential equations and generalized comparison results Citation: AIP Conference Proceedings 2046, 020105; doi: 10.1063/1.5081625 View online: https://doi.org/10.1063/1.5081625 View Table of Contents: http://aip.scitation.org/toc/apc/2046/1, Published by the *American Institute of Physics.*

8.   **Vatsala, A.S. &** Sowmya, M. (2018) Mixed generalized iterative method for scalar first order non-linear initial value problem with applications Citation: AIP Conference Proceedings 2046, 020098; doi: 10.1063/1.5081618 View online: https://doi.org/10.1063/1.5081618 View Table of Contents: http://aip.scitation.org/toc/apc/2046/1 Published by the *American Institute of Physics.*

9.   **Wade, B.A.,** Iyiola, O.S., Asante-Asamani,E.O., Furati, K.M., & Khaliq, A.Q.M.**,** (2018) Efficient Time Discretization Scheme for Nonlinear Space Fractional

Reaction-Diffusion, *International Journal of Computational Mathematics*, **95**, (6-7), 1274-1291.

10. **G.F. Birkenmeier**, Trivial generalized matrix rings, (B. Heider , coauthor), Nearrings, Nearfields and Related Topics**, (K.** Neuerburg, B. Darvaz, M. Farag, S. Jugal, and A. Badawi; eds), *World Scientific*, Singapore, (2017).

11. **A.S. Vatsala** and M. Sowmya, Laplace transform method for linear sequential Riemann Liouville and Caputo fractional differential equations Citation: 1798, 020171 (2017); doi: 10.1063/1.4972763, *American Institute of Physics*.

12. M. Sowmya and **A.S. Vatsala**, Generalized monotone method and numerical approach for coupled reaction diffusion systems M. Citation: 1798, 020153 (2017); doi: 10.1063/1.4972745, *American Institute of Physics*

13. B. Parkash, A. Setia, **A.S. Vatsala**, Haar based numberical solution of Fredholm-Volterra fractional integro-differential equation with nonlocal boundary conditions, Citation: 1798, 020140 (2017); doi: 10.1063/1.4972732 *American Institute of Physics*.

Plenary and Keynote Presentations

1. **Davis, D.** *Lifting trivial actions from group cohomology to spectra, for profinite groups*, Math Department Colloquium, University of Regina, Saskatchewan, Canada, October 23, 2020.

2. **Davis, D.** *Ambidexterity in homotopy theory*, Pre-Talbot/Topology Seminar, Mathematics Department, UL at Lafayette, LA, February 14, February 7, and January 31, 2020.

3. **Hackney, P.** *A Segal model for modular operads*, Online Seminar, Mathematical Sciences Research Institute, Oakland, CA, April 2020.

4. **Hackney, P.** *A graphical approach to higher cyclic and modular operads*, Topology Seminar, University of Washington, Seattle, March 2020

5. **Hackney, P.** *Decomposition spaces, hereditary species, décalage*, Higher Categories Seminar, Mathematical Sciences Research Institute, Oakland, CA, March 2020.

6. **Krishnamoorthy, K.** *Fiducial Inference with Applications*, Department of Statistics, University of Kentucky at Lexington, November 6, 2020.

7. **Lynd, J**. *Fusion systems with benson-Solomon components*, Colloquium at Isaac Newton Institute, Cambridge, UK, March 2020.

8. **Lynd, J.** *The Benson-Solomon fusion systems*, London Algebra Colloquium, City, University of London, January 30, 2020.

9. **Ackleh, A.S.** Southwest Research Institute, San Antonio, TX, November 4, 2019.

10. **Browne, C**. Connecting population genetics and dynamics in rapidly evolving pathogen systems, UL at Lafayette, LA, Applied Mathematics Seminar, November, 2019.

11. **Browne, C.** The math of how HIV/AIDS defeats the immune system and how to defeat the virus, Undergraduate Seminar, University of Louisiana at Lafayette, March 2019.

12. **Davis ,D**., *left Kan extensions*, Topology Seminar UL at Lafayette, LA, November 8, 2019.

13. **Davis, D.**, *left Kan extensions*, Topology Seminar UL at Lafayette, LA, November 1, 2019.

14. **Gulbudak, H.** *Modeling Within-Vector Viral Kinetics in a Multi-Scale Vector-Host Model*, Applied and Computational Mathematics Seminar, Tulane University, New Orleans, LA , February, 2019

15. **Hackney, P.** Barcelona Algebraic Topology Seminar, Universitat Autònoma de Barcelona, July 18, 2019.

16. **Hackney, P.** Algebra and Geometry Seminar, Iowa State University, April 18, 2019.

17. **Kim, S.** *Multivariate Circular Distribution with Application to a Prediction of Three Dimensional Protein Structure*, Colloquium, Louisiana State of University School of Public Health, April 22, 2019.

18. **Li, L.** *A stable partitioned FSI algorithm for incompressible flow and deforming beams,* PETE Seminar, Department of Petroleum Engineering, University of Louisiana, Lafayette, LA, November 2019.

19. **Li, L.** *A stable partitioned FSI algorithm for incompressible flow and deforming beams*, Department of Mathematics and Tianyuan Mathematical Center in Northeast China, Jilin University, Changchun, China, June 2019.

20. **Li, L.** *A stable partitioned FSI algorithm for incompressible flow and deforming beams*, Clements Scientific Computing Seminar, Southern Methodist University, Dallas, TX, April, 2019

21. **Li, L.** *An efficient finite-element algorithm for incompressible Navier-Stokes equations with high-order accuracy up to the boundary*, Computational and Applied Mathematics (CAM) seminar, Mississippi State University, MS, February, 2019.

22. **Lynd, J.** *Fusion systems,* Colloquium, University of South Alabama, December 2019.

23. **Lynd, J.** *Cohomology of functors in local finite group theory*, Algebra and Number Theory Seminar, UC Santa Cruz, November 2019.

24. **Lynd, J**. *Fusion systems in algebra and topology*, Colloquium, University of Colorado, Colorado Springs, November 2019.

25. **Lynd, J**. *Finite symmetry around a prime*, lecture at Sciences Interdisciplinary Monthly Meeting, College of Sciences, UL at Lafayette, November 2019.

26. **Sang, Y.** *Jackknife Empirical Likelihood Approach for K-sample*, Wuhan University, China, December 2019.

27. **Sang, Y**. *Energy distance and jackknife empirical likelihood*, University of Louisiana at Lafayette, November 2019.

28. **Sang, Y**. *Jackknife Empirical Likelihood Approach for K-sample Tests via Energy Distance*, Mississippi State University, Starkville, MS, March 2019.

29. **Veprauskas, A**. *Synchrony in population dynamics induced by population struc*ture, Department of Mathematics Colloquium, Trinity University, November 6, 2019.

30. **Veprauskas, A**. *Population persistence under prolonged and reoccurring disturbances*, Department of Mathematics Colloquium, United States Naval Academy, January 15, 2019.

31. **Wang, X.-S**. Applied Mathematics Seminar, UL at Lafayette, October 9, 2019.

32. **Vatsala, A.S**. System of Caputo Fractional Differential Equations with Applications to Epidemiological Models, The 28th International Conference of forum of Inter disciplinary Mathematics Synergies in Computational Mathematical, Statistical and Physical Sciences, November 23-27, 2020.
33. **Ackleh, A**. (Keynote) Can Evolution Responses to a Disturbance Alter Population Dynamics, UAE Math Day, Sharjah, United Arab Emirates, March 16, 2019.
34. **Gulbudak, H.** (Plenary) Multi-Scale Structured Models of Infectious Disease Dynamics, The 4th International Conference on Computational Mathematics and Engineering Sciences (CMES-2019), Akdeniz University, Antalya, Turkey, April, 2019.
35. **Krishnamoorthy, K.** (Keynote) Tolerance Intervals: Computation and Applications, 6th African International Conference on Statistics, Adama, Ethiopia, May 27-30, 2019.
36. **Pal, N.** Keynote. International Conference on Mathematics (ICM) Recent Advances in Algebra, Numerical Analysis, Applied Analysis & Statistics. Ton Duc Thang University, Ho Chi Minh City, Vietnam, December 2018.
37. **Pal, N.** Keynote. International Conference in Mathematics and Applications (ICMA-MU 2018) Mahidol University, Bangkok, Thailand, December 16-18, 2018.
38. **Vatsala, A.S.** Keynote. World Congress: 12th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences. Yeravan, Armenia, July 3-6, 2018.
39. **Vatsala, A.S.** Keynote by Skype. 2nd International Conference on Pure and Applied Mathematics. December 2018.
40. **Vatsala, A.S.** Keynote. World Congress: 11th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences. La Rochelle, France, July 5-8, 2016.
41. **Birkenmeier, G.F.** *Trivial Generalized Matrix Ring*, Plenary. 24th International Conference on Nearrings, Nearfields, and Related Topics. Manipal Institute of Technology, Manipal, India, July 5-12, 2015.
42. **Vatsala, A.S**. *Riemann Liouville Versus Caputo Fractional Differential and Integral Equations,* Plenary. Joint Meeting of The Seventh International Conference on Dynamic Systems and Applications and Fifth International Conference on Neural, Parallel, and Scientific Computations. Morehouse College, Atlanta, GA, May 27-30, 2015.

Colloquia and Seminar Talks

1. **Ackleh, A.S.** Department of Mathematics, Trinity University. San Antonio, TX, October 3, 2018.
2. **Birkenmeier, G.F.** *Number Theory in Groupoids and Semigroups*, 1-hour talk for undergraduate Mathematics Majors and Faculty, Loyola University. New Orleans, LA, April 19, 2018.
3. **Browne, C.** *Structure in Dynamics of Populations*. Special Mathematical Biology Seminar,University of Louisiana, Lafayette. Lafayette, LA, October 2018.
4. **Browne, C.** *Models of Dynamic Virus and Immune Response Networks*. Applied Mathematics Seminar, University of Louisiana, Lafayette. Lafayette, LA, April 17, 2018.
5. **Davis, D.** Topology Seminar. Department of Mathematics, UL at Lafayette. Lafayette, LA, Spring, 2018.
6. **Davis, D.** Topology Seminar. Department of Mathematics, UL at Lafayette. Lafayette, LA, Fall, 2018.

7. **Davis, D.** *An application of continuous homotopy fixed points to chromatic homotopy theory*. Homotopy Theory Seminar, Ohio State University. Columbus, OH, November 15, 2018.

8. **Gulbudak, H.** *Modeling Evolution and Ecology of Heterogeneous Viral Strategies in Virus- Microbe Systems*. Applied and Computational Mathematics Seminar, Tulane University. New Orleans, LA, April, 2018.

9. **Gulbudak, H.** *Modeling Distinct Virus Infection Strategies in Virus-Microbe Systems.* Applied Mathematics Seminar, University of Louisiana at Lafayette. Lafayette, LA, February, 2018.

10. **Hackney, P.** Mathematics Colloquium. Central Michigan University, October 2018.

11. **Kearfott, R.B.** *Interval Arithmetic: Fundamentals, History, and Applications*. Universidade Federal do Ceará. Fortaleza, Brazil, July 3, 2018.

12. **Kearfott, R.B.** *Interval Arithmetic: Fundamentals, Successes, and Pitfalls*. Universidad EAFIT. Medellín, Colombia, July 27, 2018.

13. **Kim, S.** *Circular Statistics, Part I.* Department of Mathematics, University of Louisiana at Lafayette. Lafayette, LA, March 9, 2018.

14. **Kim, S.** *Circular Statistics, Part II*. Department of Mathematics, University of Louisiana at Lafayette. Lafayette, LA, March 16, 2018.

15. **Kim, S.** *On the Number of Unobserved and Observed Categories When Sampling from a Multivariate Hypergeometric Population*. Department of Mathematics and Statistics, San Diego State University. San Diego, CA, April 13, 2018.

16. **Koytcheff, R.** *Graph complexes, formality, and configuration space integrals for spaces of braids*. Geometry and Topology Seminar, North Carolina State University. Raleigh, NC, March 28, 2018.

17. **Koytcheff, R.** *Graph complexes, formality, and configuration space integrals for spaces of braids*. Geometry and Topology Seminar, University of Massachusetts Amherst. Amherst, MA, April 6, 2018.

18. **Koytcheff, R.** *Graph complexes, formality, and configuration space integrals for spaces of braids*. Geometry and Topology Seminar, Tulane University. New Orleans, LA, May 3, 2018.

19. **Li, L.** *Overcoming the added‑mass instability for coupling incompressible flows and elastic beams*. Computational Mathematics Seminar Series at the Center for Computation and Technology, Louisiana State University. Baton Rouge, LA, April 17, 2018.

20. **Li, L.** *An efficient finite‑element algorithm for incompressible Navier‑Stokes equations with high‑order accuracy up‑to the boundary*. School of Mathematical Sciences, University of Electronic Science and Technology of China. Chengdu, China, December 4, 2018.

21. **Li, L.** An *efficient finite‑element algorithm for incompressible Navier‑Stokes equationse with high‑order accuracy up‑to the boundary*. College Mathematics, Sichuan University. Chengdu, China, December 10, 2018.

22. **Li, L.** *A stable partitioned FSI algorithm for incompressible flow and deforming beams.* School of Science, Harbin Institute of Technology. Shenzhen, China, December 20, 2018.

23. **Li, L.** *A stable partitioned FSI algorithm for incompressible flow and deforming beams.* Department of Mathematics, Southern University of Science and Technology. Shenzhen, China, December 21, 2018.

24. **Li, L.** *A stable partitioned FSI algorithm for incompressible flow and deforming beams.* School of Information Science and Technology, Shanghai Tech University. Shanghai, China, December 24, 2018.

25. **Lynd, J.** *The Benson-Solomon fusion systems.* Group Theory Seminar, University of Chicago. Chicago, IL, May 17, 2018.

26. **Lynd, J.** *Fusion systems.* Colloquium, Northern Illinois University. DeKalb, IL, November 16, 2018.

27. **Pal, N.** *Estimation of a normal scale with a single observation.* Faculty of Mathematics & Statistics, Ton Duc Thang University. Ho Chi Minh City, Vietnam, October 16, 2018.

28. **Salceanu, P.** *Competitive outcomes between zebra and quagga mussels in a discrete-time model with migration among patches.* The Joint Mathematics Meetings. San Diego, CA, January 10-13, 2018

29. **Sang, Y.** *Jackknife Empirical Likelihood Approach for K-sample Tests via Energy Distance.* Shandong University. Jinan, China, December 2018.

30. **Sang, Y**. *Jackknife Empirical Likelihood for Gini Correlation and their Equality Testing.* Shandong University of Technology. Zibo, China, July 2018.

31. **Sang, Y.** *Jackknife Empirical Likelihood for Gini Correlation and their Equality Testing.* Shandong Normal University. Jinan, China, June 2018.

32. **Veprauskas, A.** Applied Math Seminar. Department of Applied and Computational Mathematics, University of Notre Dame. Notre Dame, Indiana, October 25, 2018.

33. **Wang, X-S.** University of Houston-Downtown. Houston, TX, November 1, 2018.

34. **Wang, X-S.** University of Central Florida. Orlando, FL, October 5, 2018.

35. **Wang, X-S.** Shenzhen University. Guangdong, China, July 1, 2018.

36. **Wang, X-S.** Xi'an Jiaotong University. Xi'an, China, June 17, 2018.

37. **Ackleh, A.S.** Department of Mathematical Sciences. Dr. Karen A. Ames Lecture Series on Applied Mathematics, University of Alabama at Huntsville. Huntsville, AL, March 31, 2017.

38. **Ackleh, A.S.** Department of Physics, University of New Orleans. New Orleans, LA, April 5, 2017.

39. **Ackleh, A.S.** College of Sciences, Kasetsart University. Bangkok, Thailand, June 7, 2017.

40. **Browne, C.J.** *Mathematical Models of Virus and Immune Response Dynamics.* Mathematics Colloquium, San Diego State University. San Diego, Ca, January 2017.

41. **Browne, C.J.** *Basic Reproduction Number in Population Models with Periodic Forcing.* Applied Math Seminar, UL at Lafayette. Lafayette, LA, February 2017.

42. **Browne, C.J.** *Dynamics of Virus and Immune Response Network Models.* Analysis, Dynamics, and Applications Seminar. University of Arizona, April 2017.

43. **Browne, C.J.** *Mathematical modeling of infectious diseases: from Ebola outbreaks to HIV immunology.* Sciences Interdisciplinary Monthly Meeting (SIMM), University of Louisiana at Lafayette, Lafayette, LA, April 2017.

44. **Browne, C.J.** *Mathematical modeling of infectious diseases: from Ebola outbreaks to HIV immunology, Math Talks Seminar* (over 30 undergraduate students attended). Kennesaw State University. Marietta, GA, October 2017.

45. **Browne, C.J.** *Reproduction Number in Population Models with Periodic Forcing.* Special Invited Mathematical Biology Seminar, Arizona State University. Tempe, AZ, October 2017.

46. **Deng, K.** *Dynamics of an SIS epidemic reaction-diffusion model*. Shanghai Normal University. Shanghai, China, May 23, 2017.
47. **Deng, K.** *Asymptotic behavior for a reaction-diffusion population model with delay*. Tongji University. Shanghai, China, May 23, 2017.
48. **Deng, K.** *Global existence and blow-up for nonlinear diffusion equations with boundary flux governed by memory*. Louisiana State University. Baton Rouge, LA, October 11, 2017.
49. **Davis, D.** Topology Seminar, 5 lectures. University of Louisiana at Lafayette. Lafayette, LA, Fall 2017.
50. **Gulbudak, H**. *A Structured Avian Influenza Model with Imperfect Vaccination*. ASU Minicourse, Special Mathematical Biology Seminar, Arizona State University. Tempe, AZ, October, 2017.
51. **Li, L.** *Overcoming the added-mass instability for coupling incompressible flows and elastic beams*. College of Mathematics, Sichuan University. Chengdu, China, December, 2017
52. **Li, L.** *Overcoming the added-mass instability for coupling incompressible flows and elastic beams.* School of Mathematical Sciences, University of Electronic Science and Technology of China. Chengdu, China, December, 2017.
53. **Lynd, J.** Algebra Seminar, 5 lectures. University of Louisiana at Lafayette. Lafayette, LA, 2017.
54. **Koytcheff, R.** *Homotopy string links, configuration spaces, and the kappa-invariant.* Topology Seminar, LSU. Baton Rouge, LA, October 2017.
55. **Koytcheff, R.** *Homotopy string links, configuration spaces, and the kappa-invariant, Special Session on Algebraic and Combinatorial Structures in Knot Theory*. AMS Western Sectional Meeting. UC Riverside, Riverside, CA, November 2017.
56. **Pal, N.** A Parametric Bootstrap Method to Analyze Non-negative Data Subject to Two Factors Using Gamma Models', Southern Illinois University, April 20, 2017.
57. **Pal, N.** *Analysis of Non-negative Observations Subject to Two Factors Using Gamma Models*. University of Illinois at Chicago. Chicago, IL, September 22, 2017.
58. **Pal, N.** *Inferences for a Skew-Normal Distribution*. University of Maryland - Baltimore County. Baltimore, MD, November 3, 2017.
59. **Wang, X-S.** Shanghai Maritime University. Shanghai, China, December 8, 2017.
60. **Wang, X-S.** University of Southern Mississippi. Hattiesburg, MS, October 6, 2017.
61. **Wang, X-S.** East China Normal University. Shanghai, China, June 2, 2017.
62. **Wang, X-S.** York University. Toronto, ON, Canada, May 8, 2017.
63. **Wang, X-S.** Fields Institute. Toronto, ON, Canada, May 5, 2017.
64. **Ackleh, A.S.** Department of Mathematics and Statistics, Sam Houston State University. Huntsville, TX, April, 2016.
65. **Birkenmeier, G.F.** *What binary operations can do for you*. Undergraduate Math Majors, Loyola University. New Orleans, LA, March 17, 2016.
66. **Browne, C.J.** *Immune Response in Virus Model Structured by Cell Infection-Age*. SIAM SEAS Conference. University of Georgia, Athens, GA, March 2016.
67. **Browne, C.J.** *Modeling the Ebola Outbreak: Contact Tracing and Infection-Age Structure.* Mathematical Biology Seminar, Georgia State University. Atlanta, GA, April 2016.

68. **Browne, C.J.** *Virus-Immune Dynamics in Age-Structured HIV Model.* Mathematical Biology and Ecology Seminar, Georgia Institute of Technology. Atlanta, GA, April 2016.
69. **Browne, C.J.** *Modeling Multi-Epitope HIV/CTL Immune Response Dynamics and Evolution.* Mathematical Biology Seminar, Arizona State University. Tempe, AZ, September 2016.
70. **Browne, C.J.** *Modeling Multi-Epitope HIV/CTL Immune Response Dynamics and Evolution.* Applied Mathematics Seminar, University of Louisiana at Lafayette. Lafayette, LA, October 2016.
71. **Davis, D.** *Comparing continuous and discrete homotopy fixed points, with an application to the Ausoni-Rognes conjecture.* Topology Seminar, John Hopkins University. Baltimore, MD, February 8, 2016.
72. **Davis, D.** *Examples of discrete G-spectra and homotopy limits of G-spectra.* Topology Seminar, University of Rochester. Rochester, NY, April 1, 2016.
73. **Davis, D.** *Comparing continuous and discrete homotopy fixed points, with an application to the Ausoni-Rognes conjecture.* Topology Seminar, University of Rochester. Rochester, NY, April 1, 2016.
74. **Davis, D.** UL Mathematics Department Topology Seminar, 7 talks in Spring 2016 and 8 talks in Fall 2016.
75. **Deng, K.** *Competitive exclusion and coexistence in a two-strain pathogen model with diffusion*, Purdue University. West Lafayette, IN, April 18, 2016.
76. **Heatherly, H.** UL Algebra Seminar, 3 talks in 2016.
77. **Heatherly, H.** *The Development of Transcendental Numbers: A Historical Overview.* Department of Mathematics Colloquia. September 22, 2016.
78. **Magidin, A.** UL Algebra Seminar, 12 talks in Spring 2016 and Fall 2016.
79. **Pal, N**. *Real rank zero for purely infinite corona algebra.* Spring Operator Algebras Program, East China Normal University. Shanghai, China, May 2-19, 2016.
80. **Pal, N.** *Closed Convex Hulls of Unitary Orbits of certain C*-algebras.* Fields Institute Workshop, University of Ottawa. Ottawa, ON, Canada, May 29-June 13, 2016.
81. **Pal, N.** *Real rank zero for purely infinite corona algebras.* Canadian Annual Symposium on Operator Algebras and their Applications (COSy). Centre de Recherches Mathematiques (CRM), Montreal, QC, June 13-18, 2016.
82. **Pal, N.** *Closed convex hulls of unitary ordits of certain C*-algebras.* International Conference on structure of C*-algebras and tracial approximation. Hebei Normal University, Shijiazhuang, Hebei, China, July 3-8, 2016.
83. **Pal, N.** Bio-Math Seminar Series. Clarkson University. Clarkson, NY, October 14, 2016.
84. **Wang, X-S.** UL Applied Math Seminar. September 13, 2016.
85. **Wang, X-S.** UL Analysis Seminar. December 1, 2016.
86. **Wang, X-S.** Department Colloquium. Shanghai Maritime University. Shanghai, China, December 23, 2016.
87. **Wang, X-S.** Department Colloquium. Tongji University. Shanghai, China, December 28, 2016.
88. **Birkenmeier, G.F.** UL Algebra Seminar. 10 talks in Spring 2015 and Fall 2015.
89. **Davis, D.** UL Topology Seminar. 4 talks in Spring 2015 and 6 talks in Fall 2015.
90. **Deng, K.** *Blow-up for the heat equation with a general memory boundary condition.* Huazhong University of Science & Technology. Wuhan, China, June 1, 2015.

91. **Deng, K.** *Sensitivity analysis for a structured juvenile-adult model*. Wuhan University of Technology. Wuhan, China, June 11, 2015.
92. **Deng, K.** *Asymptotic behavior for a reaction-diffusion population model with delay.* Renmin University. Beijing, China, June 22, 2015.
93. **Rogers, C.** *The Dold-Kan correspondence, Sullivan's realization, and the Maurer-Cartan functor*. Topology Seminar, UL Lafayette. Lafayette, LA, Fall 2015.
94. **Rogers, C.** *From the Dold-Kan correspondence to Sullivan's realization functor*. Topology Seminar. UL Lafayette, Lafayette, LA, Fall 2015.
95. **Rogers, C.** *Sullivan's Realization Functor and a Brief Overview of Rational Homotopy Theory*. Topology Seminar. UL Lafayette, Lafayette, LA, Fall 2015.
96. **Rogers, C.** *Sullivan's realization functor and Sullivan models for spheres*. Topology Seminar. UL Lafayette, Lafayette, LA, Fall 2015.

Invited Conference and Workshop Talks

1. **Beaulieu, P**., Dolenc, N. & Sheppard, P. *Using Active Learning and Gameplay in Understanding Species Survival Traits*. Society for Information Technology & Teacher Education International Conference, New Orleans, LA, April 7, 2020.
2. **Deng, K.** *Global existence and blow-up for nonlinear diffusion equations with boundary flux governed by memory*, Texas Analysis and Mathematical Physics Symposium 2019/20, Houston, Texas, January 31-February 2, 2020.
3. **Hackney, P.** *Recent developments in the theory of higher properads*, The 3rd Conference on Operad Theory and Related Topics, Jilin University / Online. September 2020.
4. **Hackney, P.** *Higher properads*, Invited keynote presentation in Special Session on Category Theory, Algebraic Topology, and K-Theory at 64th Annual Meeting of the Australian Mathematical Society, University of New England / Online, December 2020.
5. **Lynd, J**. *Punctured groups for exotic fusion systems*, AMS Eastern Sectional Meeting, October 3-4, 2020.
6. **Robert, L.** *The commutator subgroup of the group of unitaries of a C*-algebra*, The 48th Canadian Operator Symposium, May 25 - 29, 2020.
7. **Robert, L.** *Lie ideals and normal subgroups in C*-algeb*ra, Zagreb Workshop on Operator Theory, June 29-30, 2020.
8. **Wang, X.-S.** *Resonance of periodic combination antiviral therapy and intracellular delays in virus model*, SIAM Texas-Louisiana Sectional Meeting, Virtual Zoom Meeting, Hosted by Texas A&M University October 16-18, 2020.
9. **Wang, X.-S.** *Optimal control of a size-structured model for metastatic cancer treatmen*t, 2020 Joint Mathematics Meetings, Denver, Colorado, January 15-18, 2020.
10. **Ackleh, A.** *The Effect of Prey Evolution to Develop Toxicant Resistance on Predator-Prey Dynamics*, International Conference on Difference Equations and Application (ICDEA) London, June 24-28, 2019.
11. **Browne, C.** *Resonance of periodic combination antiviral therapy and intracellular delays in virus model*, 4th International Conference on Computational Mathematics and Engineering Sciences (CMES-2019), Antalya, Turkey, April, 2019.

12. **Browne, C**. *Resonance of periodic combination antiviral therapy and intracellular delays in virus model*, Fifth International Conference on Computational and Mathematical Population Dynamics, May, 2019.

13. **Browne, C.** *Predator-prey dynamics of HIV/SIV and immune response: an evolutionary perspective*, Second International Conference on Applications of Mathematics to Nonlinear Sciences (AMNS-2019), Pokhara, Nepal, June, 2019.

14. **Browne, C.** *Infection severity across scales in multi-strain immuno-epidemiological Dengue model structured by host antibody level,* SMB 2019 Annual Meeting of the Society for Mathematical Biology, Montreal, Canada, July 2019.

15. **Deng, K**. *Asymptotic behavior of an SIR reaction-diffusion model with a linear source*, Mini-symposium on Disease Modeling - from within host to population at The Fifth International Conference on Computational and Mathematical Population Dynamics, Fort Lauderdale, Florida, May 19-24, 2019.

16. **Gulbudak, H.** *Heterogeneous Virus Strategies Promote Coexistence in Virus-Microbe Systems,* **Applications of Mathematics to Nonlinear Sciences (AMNS-2019)**, Pokhara, Nepal, June, 2019.

17. **Gulbudak, H**. *Infection severity across scales in multi-strain immuno-epidemiological Dengue model structured by host antibody level,* **International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems (ICMA-2019),** Arizona State University, Tempe, Arizona, October, 2019.

18. **Gulbudak, H.** *Modeling Within-Vector Viral Kinetics in a Multi-Scale Vector-Host Model* and *Two-Strain Multi-Scale Dengue Model Structured by Dynamic Host Antibody Leve,l* **The 5th International Conference on Computational & Mathematical Population Dynamics (CMPD5-2019),** Florida Atlantic University, Fort Lauderdale, Florida, May, 2019.

19. **Gulbudak, H.** *Deciphering the signature of within-vector viral kinetics on arbovirus disease dynamics in a multi-scale model,* **The 2nd Annual SIAM Texas-Louisiana Sectional Meeting,** Southern Methodist University, Dallas, TX, 2019.

20. **Hackney, P.** *Right Adjoints to Operadic Restriction Functors*. Special Session on Applied Category Theory, Fall Western AMS Sectional Meeting #1153, University of California, Riverside, Riverside, CA, November 9-10, 2019.

21. **Hackney, P.** *Right Adjoints to Operadic Restriction Functors*. The International Category Theory Conference, University of Edinburgh, Edinburgh, Scotland, July 8, 2019.

22. **Hackney, P.** *A graph category for higher modular operads*, Workshop on Functor Calculus, The Ohio State University, Columbus, OH, March 16–17, 2019**.**

23. **Koytcheff, R.** *The Taylor tower for the space of knots and finite-type invariants*", Workshop on Functor Calculus, The Ohio State University, March 2019

24. **Koytcheff, R. A Morse-theoretic approach to the space of unlinks**, KaBiN (Knots and Braids in Norway), NTNU, May 2019.

25. **Koytcheff, R.** *Operadic decompositions of spaces of string links* and *The Taylor tower for the space of knots and finite-type invariants*, Topology special session, Canadian Mathematical Society Summer Meeting, University of Regina, Regina, SK, June 8, 2019.

26. **Koytcheff, R** *Configuration space integrals for spaces of knots, links, and braids*, Four-Manifolds: a Confluence of High and Low Dimensions, The Fields Institute, Toronto, ON, Canada, July 12, 2019.

27. **Krishnamoorthy, K.** *Tolerance Intervals: Computation and Applications,* The 6th African International Conference On Statistics, Adama, Ethiopia, March 27 - 30, 2019. (Invited)

28. **Lynd, J.** *Weight conjectures for fusion systems*, AMS Southeastern Sectional Meeting, Auburn University, AL, March 2019.

29. **Lynd, J.** *The Benson-Solomon fusion systems*, Vietnam-USA Joint Mathematical Meeting, Quy Nhon, Vietnam, June 2019.

30. **Lynd, J.** *Obstructions to rigid actions on linking systems*, China-US Group Theory Summit, San Marcos, TX, August 2019.

31. **Lynd, J.** *Rigid automorphisms of linking systems*, Groups and Geometries, Banff International Research Station, Banff, Alberta, August 2019.

32. **Lynd, J**. *Weight conjectures for fusion systems*, AMS Eastern Sectional Meeting, Binghamton, NY, October 2019.

33. **Lynd, J**. *Automorphisms of linking systems*, AMS Western Sectional Meeting, UC Riverside, November 2019.

34. **Robert, L**. Topology and Measure in Dynamics and Operator Algebras , BIRS, Banff, September 8--September 13, 2019.

35. **Robert, L.** Great Plains Operator Theory Symposium, Texas A&M University, May 28--June 1, 2019.

36. **Sang, Y**. *Jackknife Empirical Likelihood Approach for K-sample Tests via Energy Distance*, ICSA, Raleigh, NC, June 2019.

37. **Vatsala, A.S**. *Quenching Problem for Two Dimensional Time Fractional Reaction-Diffusion Equation via Lower Solution Method*, Southeastern-Atlantic Regional Conference on Differential Equations, Embry-Riddle Aeronautical University, Daytona Beach, FL, October 26-27, 2019.

38. **Vatsala, A.S.** *One Dimensional Sub-Hyperbolic Equation via Sequential Caputo Fractional Derivative*, The Eleventh IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Georgia Center for Continuing Education, University of Georgia, Athens GA, April 17-19, 2019.

39. **Vatsala, A.S** *Mixed Generalized Iterative Method For Nonlinear Problems,* American Mathematical Society Joint Mathematics Meetings (JMM), Baltimore, MD, January 16-19, 2019.

40. **Veprauskas, A.** *Modeling the impacts of disturbances: What can we learn about population responses and possible management strategies?*, MathFest, Cincinnati, OH, August 2, 2019

41. **Veprauskas, A.** *Evolutionary responses to a disturbance in a predator-prey system*, Society for Mathematical Biology Annual Meeting, Montreal, Canada, July 2019.

42. **Veprauskas, A.** *Understanding species persistence under reoccurring and interacting disturbances*, Joint Math Meetings AMS Special Session in Natural Resource Modeling, Baltimore, MD, January 16, 2019.

43. **Wade, B**. *Operator **Splitting with Some Exponential Time Differencing Schemes For Reaction-Diffusion Systems***, Computational and Mathematical Methods for Science and Engineering (CMMSE), Cadiz, Spain, July 2, 2019. (Invited)

44. **Wade, B**. *Exponential Time Differencing with Real, Distinct Poles Rational Approximation,* Computational and Mathematical Methods in Science and Engineering (CMMSE), Cadiz, Spain, July 6, 2019. (Invited)

45. **Wang, X.-S.** *Numerical optimal control of a size-structured PDE model for metastatic cancer treatment*, SCALA 2019: Scientific Computation Around Louisiana, Tulane University, New Orleans, LA, February 15-16, 2019.

46. **Wang, X.-S.** *Multiple-scale analysis in an ion channel model.* Workshop on Differential Equations with Applications, Chang'an University, China, May 24-26, 2019.

47. **Wang, X.-S.** *Optimal control of a PDE tumor mode*l. The Thirteenth International Conference on Recent Advances in Applied Dynamical Systems, Hangzhou Normal University, China, June 8-10, 2019.

48. **Wang, X.-S** *Dirichlet problem for a delayed diffusive hematopoiesis model*. Workshop on Mathematical Modeling and Analysis of Population Dynamics, Guangzhou University, China, July 1-5, 2019.

49. **Ackleh, A.** *Changes in Population Outcomes Resulting from Evolutionary Responses to a Disturbance,* Invited. Joint Mathematical Meeting. San Diego, CA, January 9-14, 2018.

50. **Ackleh, A.** *Examining the Effect of Evolution in Response to a Disturbance on Population Dynamics,* Invited. Nashville, TN, April 14-15, 2018.

51. **Ackleh, A.** *Changes in Population Dynamics Resulting from Evolutionary Response to an Environmental Disturbance,* Invited. Frontiers of Mathematical Biology: Modeling, Computation and Analysis. Orlando, FL, May 2-4, 2018.

52. **Ackleh, A.** *A Second Order Finite Difference Scheme for a Variable Infection-Structured Model of* Mycobacterium Marinum *Dynamics in Aquatic Animals,* Invited, Main Speaker. Sixth Palestinian Conference on Modern Trends in Mathematics and Physics (PCMTMP-VI), Palestine Technical University - Kadoorie. Tulkarm, August 5-8, 2018.

53. **Ackleh, A.** *The Effect of Toxicant Resistance Evolution in the Prey Population on the Dynamics of a Predator-Prey System,* Invited. AMS Meeting #1144, San Francisco, CA, October 27-28, 2018.

54. **Ackleh, A.** *A Model for Structured Population Dynamics with Indefinite Growth Rates Coupled with the Environment, Mathematical Methods and Modeling in Engineering and Life Sciences,* Invited. Buenos Aires, Argentina, November 7-9, 2018.

55. **Birkenmeier, G.** *A Classification of QF-rings*. Southern Regional Algebra Conference, Auburn University. Montgomery, AL, April 20-22, 2018.

56. **Browne, C.** *Network Model for Ecology of Virus and Immune Response during HIV Infection*. SIAM Texas-Louisiana Section Conference, LSU. Baton Rouge, Louisiana, September 2018.

57. **Browne, C.** *Models of Dynamic Virus and Immune Response Networks, AIMS Conference on Dynamical Systems*. Differential Equations and Applications. Taipei, Taiwan. July 2018.

58. **Browne, C.** *Models of Dynamic Virus and Immune Response Networks, Frontiers of Mathematical Biology: Modeling, Computation and Analysis*. University of Central Florida. Orlando, Florida. May 2018.

59. **Browne, C.** *Modeling immune escape in intra-host HIV and CTL networks, Host-Pathogen Dynamics Workshop*. Mathematical Biosciences Institute, Ohio State University. Columbus, Ohio. February 2018

60. **Browne, C.** *Predator-prey dynamics of intra-host simian immunodeficiency virus infection within the host: an evolutionary perspective*. SCALA 2018 - Scientific Computing Around Louisiana, Louisiana State University. Baton Rouge, Louisiana, February 2018.

61. **Davis, D.** *A long exact sequence for the E_2-term of the homotopy fixed point spectral sequence for a tower of concrete discrete G-spectra,* Invited. Special Session on Recent Progress and New Directions in Homotopy Theory, Spring Southeastern AMS Sectional Meeting. Vanderbilt University, Nashville, TN, April 14, 2018.

62. **Deng, K.** *Global attractivity of a delayed reaction-diffusion equation with variable coefficients*. AMS Spring Southeastern Sectional Meeting Special Session on Recent Advances in Mathematical Biology. Vanderbilt University, Nashville, TN, April 14-15, 2018.

63. **Deng, K.** *Asymptotic behavior of an SIR reaction-diffusion model with a linear source*. AMS Fall Western Sectional Meeting Special Session on Mathematical Biology with a Focus on Modeling, Analysis, and Simulation. San Francisco, CA, October 27-28, 2018.

64. **Gulbudak, H.** *Modeling Host-Parasite Dynamics Across Scales: From Viruses of Microbes to Vector-Borne Diseases*. ULL Sciences Interdisciplinary Monthly Meeting (SIMM), University of Louisiana at Lafayette. Lafayette, LA, November, 2018.

65. **Gulbudak, H.** *Two-Strain Multi-Scale Dengue Model Structured by Dynamic Host Antibody Level*. The 1st Annual Meeting of SIAM Texas-Louisiana Section. Louisiana State University, Baton Rouge, LA, October, 2018.

66. **Gulbudak, H.** *Modeling Evolution and Spread of Vector-Borne Diseases*. The 12th AIMS Conference on Dynamical Systems, Dierential Equations and Applications. National Taiwan University, Taipei, Taiwan, July, 2018.

67. **Gulbudak, H.** *Ecology and Evolution of Vector-Borne Diseases in a Multi-Scale Model*. The International Conference on Applied Mathematics in Engineering (ICAME 2018). Balikesir University, Balikesir, Turkey, June, 2018.

68. **Gulbudak, H**. *Heterogeneous Virus Strategies Promotes Coexistence in Virus-Microbe Systems*. Frontiers of Mathematical Biology: Modeling, Computation and Analysis. University of Central Florida, Orlando, FL, May, 2018.

69. **Gulbudak, H.** *Vector-Borne Pathogen and Host Evolution in a Structured Immuno-Epidemiological System*. Workshop 4: Multiscale Dynamics of Infections, Mathematical Biosciences Institution. Columbus, OH, April, 2018.

70. **Gulbudak, H.** *Modeling Avian Influenza and Control Strategies in Poultry*. Workshop 3: Disease Ecology / Eco-epidemiology, Mathematical Biosciences Institution. Columbus, OH, March, 2018.

71. **Hackney, P.** Special Session on Structured Homotopy Theory, AMS Central Sectional Meeting. University of Michigan, Ann Arbor, Michigan, October 2018.

72. **Kearfott, B.** *Interval Mathematics, Philosophy, Fundamentals, and Applications: Connections to and Contrast with Fuzzy Set Theory*, Invited Hour Plenary. 2018 Joint Meeting of the North American Fuzzy Information Processing Society (NAFIPS) and the Fifth Brazilian Congress on Fuzzy Systems. Fortaleza, Brazil, July 5, 2018.

73. **Koytcheff**, **R.** *Graph complexes, formality, and configuration space integrals for spaces of braids.* Graph Complexes, Configuration Spaces, and Manifold Calculus. University of British Columbia, Vancouver, BC, Canada, May 25, 2018.

74. **Li, L.** *Advances in PDEs: Theory, Computation and Application to CFD.* Institute for Computational and Experimental Research in Mathematics, Brown University. Providence, RI, August 20-24, 2018.

75. **Li, L.** *Recent Advance on Extending the Added-Mass Partitioned (AMP) Scheme for Solving FSI Problems Coupling Incompressible Flows with Elastic Beams to the 3D Regime.* 14th Symposium on Overset Composite Grids and Solution Technology. University of Maryland, College Park, Maryland October 4, 2018.

76. **Li, L.** Celebrating 75 Years of Mathematics of Computation, Institute for Computational and Experimental Research in Mathematics, Brown University. Providence, RI, November 1-3, 2018.

77. **Ng, P.** *Purely Infinite Corona Algebras and Extension Theory.* Universidad Autonoma Del Estado De Hildalgo. Hildago, Mexico January 21-25, 2018.

78. **Ng, P.** *Purely Infinite Corona Algebras and Extension Theory.* University of Ottawa. Ottawa, ON, Canada, March 15-24, 2018.

79. **Ng, P.** *Norm amenability.* Spring Program at the Research Center for Operator Algebras, East China Normal University. Shanghai, China, April 15-21, 2018.

80. **Ng, P.** *Essential codimension.* International Workshop on Operator Theory and its Applications (IWOTA), East China Normal University. Shanghai, China, July 21-27, 2018.

81. **Pal, N.** Special topic: 'Shrinkage Estimation & Ridge Regression,' Summer Workshop on Statistical Modelling and Applications, School of Economic Mathematics & Statistics, University of Economics Ho Chi Minh City. Ho Chi Minh City, Vietnam, August 9-15, 2018.

82. **Pal, N.** Workshop on Bayesian Analysis and Predictive Inference. School of Economic Mathematics & Statistics, University of Economics Ho Chi Minh City. Ho Chi Minh City, Vietnam, October 15-17, 2018.

83. **Robert, L.** Mini-workshop on the Cuntz semigroup. University of Houston. Houston, TX, June 18-20, 2018.

84. **Robert, L.** International Workshop on Operator Theory and Applications, East China Normal University. Shanghai, China, July 23-27, 2018.

85. **Robert, L.** *Model Theory and Operator Algebras.* Banff, Canada, November 25-30, 2018.

86. **Salceanu, P.** *Competitive outcomes between zebra and quagga mussels in a discrete-time model with migration among patches.* The Joint Mathematics Meetings. San Diego, CA, January 10-13, 2018.

87. **Sang, Y.** *Weighted Jackknife Empirical Likelihood*, Invited Talk. 2018 International Chinese Statistical Association (ICSA) Applied Statistics Symposium. New Brunswick, NJ, June 2018.

88. **Sang, Y.** *Robust Jackknife Empirical Likelihood for Non-smooth U-structure equations*, Invited Talk. 2018 ICSA China Conference, Qingdao, China, July 2018.

89. **Vatsala, A.S.** Invited Talk. Special Session at AMS Joint Mathematics Meeting. San Diego, CA, January 10-13, 2018.

90. **Vatsala, A.S.** Special Session at AMS Spring Central Sectional Meeting**,** Ohio State University, Columbus, OH, March 16-18, 2018. (Invited Talk)

91. **Wang, X.-S**. *Asymptotic analysis of difference equations*. Canadian Mathematical Society Winter Meeting. Vancouver, Canada, December 7-10, 2018.

92. **Wang, X.-S**. *Viral dynamics revisited: partial degeneracy and spatial heterogeneity*. SIAM Texas-Louisiana Sectional Meeting. Louisiana State University, Baton Rouge, LA, October 5-7, 2018.

93. **Wang, X.-S**. *On quasi-orthogonal polynomials*. Summer Research Institute on q-Series, Nankai University. Tianjin, China, July 25-August 15, 2018.

94. **Wang, X.-S**. *Steady-state and dynamical solutions of Poisson-Nernst-Planck systems*. PDEs from Biology, Ecology and Life Sciences: Models and Analysis, Hong Kong Polytechnic University. Hong Kong, July 10-11, 2018.

95. **Wang, X.-S**. *Joint impact of cell-free and cell-to-cell transmissions in viral dynamics*. The 12th AIMS Conference on Dynamical Systems, Differential Equations and Applications. Taipei, Taiwan, July 5-9, 2018.

96. **Wang, X.-S**. *Dynamics of an ion channel model*. The Twelfth International Conference on Recent Advances in Applied Dynamical Systems. Chongqing Normal University, Chongqing, China, June 8-10, 2018.

97. **Wang, X.-S**. *Aysmptotic analysis of time-dependent Poisson-Nernst-Planck systems*. International Conference on Applied Mathematics, City University of Hong Kong. Hong Kong, June 4-8, 2018.

98. **Wang, X.-S**. *Traveling waves in epidemic models: non-monotone diffusive systems with non-monotone incidence rates*. Joint Mathematics Meetings. San Diego, CA, January 10, 2018.

99. **Ackleh, A.S.** *A Model for the Interaction of Phytoplankton Aggregates and the Environment: Approximation and Parameter Estimation*. Joint Mathematical Meeting. Atlanta, GA, January 4-7, 2017.

100. **Ackleh, A.S.** *Analysis of Lethal and Sublethal Impacts of Environmental Disasters on Sperm Whales Using Stochastic Modeling*. Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, February 6-9, 2017.

101. **Ackleh, A.S**. *Combining Acoustic Data and Statistical Modeling to Understand Marine Mammal Population Dynamics and Abundance*, Invited. The 42nd IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP). New Orleans, LA, March 5-9, 2017.

102. **Ackleh, A.S.** *Population models with discrete or continuous trait spaces: Competitive exclusion or Coexistence?* Keynote. 7th Annual Conference of the Lebanese Society for the Mathematical Sciences (LSMS). Balamand, Lebanon, April 20-21, 2017.

103. **Ackleh, A.S.** *A High-Resolution Finite Difference Method for a Nonlinear Model of Structured Susceptible-Infected Population Coupled with the Environment*, Invited. AMS Meeting #1131. Denton, TX, September 9-10, 2017.

104. **Ackleh, A.S.** *Disparate Disease Outcomes in Chronic Infection: The Role of Intra-Host Variability*, Invited. ICMA VI: The Sixth International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems. Tuscon, AZ, October 20-22, 2017.

105. **Ackleh, A.S.** *Modeling as a Complementary Tool to Acoustic Data for Understanding the Impact of Environmental Disasters on Marine Mammals*, Invited. 174th Meeting of Acoustical Society of America. New Orleans, LA, December 4-8, 2017.

106. **Birkenmeier, G.F**. *A Description of Indecomposable Quasi-Frobenius Rings*. Southern Regional Alegebra Conference, University of South Alabama. Mobile, AL, March 17-19, 2017.

107. **Browne, C.J.** *Modeling Multi-Epitope HIV/CTL Immune Response Dynamics and Evolution*. Joint Mathematics Meeting (JMM). Atlanta, GA, January 2017.

108. **Browne, C.J.** *Network Model of Muti-Epitope HIV Immune Escape*. Bio-Math Modeling work-shop (MOBI-2017). Rome, Italy, June 2017.

109. **Browne, C.J.** *Dynamics of Virus and Immune Response Networks*. Southeastern-Atlantic Regional Conference on Dierential Equations (SEARCDE 2017). Kennesaw State University, Kennesaw, GA, October 2017.

110. **Browne, C.J.** *Dynamics of Virus and Immune Response in Multi-Epitope Network*. Sixth International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems (ICMA IV). Tucson, AZ, October 2017.

111. **Chiquet, R.A.** *Analysis of Lethal and Sublethal Impacts of Environmental Diasters on Sperm Whales using Stochastic Modeling*. AMS MAA Joint Meetings. Atlanta, GA, January 2017.

112. **Deng, K.** *Extinction and uniform strong persistence of a size-structured population model*. 2017 Joint Mathematics Meetings AMS Special Session on Analytical and Computational Studies in Mathematical Biology. Atlanta, Georgia, January 4-7, 2017.

113. **Gulbudak, H.** *Heterogeneous Virus Strategies Promotes Coexistence in Virus-Microbe Systems*. The Sixth International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems. University of Arizona, Tucson, AZ, October, 2017.

114. **Gulbudak, H.** *Modeling Distinct Virus Infection Strategies in Virus-Microbe Systems*. The 37th Southeastern-Atlantic Regional Conference on Differential Equations (SEARCDE). Kennesaw State University, Atlanta, GA, October, 2017.

115. **Kim, S.** *Multivariate and Multiple Circle Regression Models*. 61st Biennial ISI World Statistics Congress. Marrakech, Morocco, July 16-21, 2017.

116. **Kim, S.** *A Multivariate Circular Distribution with Applications to the Protein Structure Prediction Problem.* 11th International Conference on Mathematical Sciences for Advancement of Science and Technology. Kolkata, India, December 21-23, 2017.

117. **Krishnamoorthy, K.** *Generalized Fiducial Inference with Appliciations*. 4th African International Conference on Statistics. Limpopo, South Africa, March 20-23, 2017

118. **Li, L.** *A Split-Step Finite- Element Method for Incompressible Navier-Stokes Equations with High-Order Accuracy up-to the Boundary*. The 3rd Annual Meeting of SIAM Central States Section. Fort Collins, CO, September, 2017.

119. **Ng, P.** *Purely Infinite Corona Algebras and Extensions*. Workshop on Dynamics, Numeration, Tilings, and Graph Algebras, Universidade Federal de Santa Catarina. Florianópolis, Santa Catarina, Brazil, March 20-24, 2017.

120. **Ng, P.** *Purely infinite corona algebras, extensions, and double commutant theorems*. Research Center for Operator Algebras at the East China Normal University. Shanghai, China, June 3-7, 2017

121. **Ng, P.** *Purely infinite corona algebras, extensions and double commutant theorems.* Summer School on Operator Algebras and Noncommutative Geometry. Hebei Normal University, Shijiazhuang, China, June 26-July 1, 2017.

122. **Ng, P.** *Purely infinite corona algebras extensions, and double commutant theorems.* Mathematical Congress of the Americas at McGill University. Montreal, QC, Canada, July 24-28, 2017.

123. **Ng, P.** *Purely infinite corona algebras, extensions, and double commutant theorems.* Workshop Applications of Model Theory to Operator Algebras. University of Houston, Houston, TX, July 31-August 4, 2017.

124. **Ng, P.** *Purely infinite corona algebras, extensions and double commutant theorems.* American Mathematical Society Sectional Meeting. University of Central Florida, Orlando, FL, September 23-24, 2017.

125. **Pal, N.** *Bayesian Models & Inference and Statistical Decision Making, Conducted Module-4: Decision Theory & Bayesian Analysis*, Invited. Ho Chi Minh City University of Science. Ho Chi Minh City, Vietnam, May 22-26, 2017.

126. **Pal, N.** *Statistical Asymptotic Theory*, Invited. Ton Duc Thang University. Ho Chi Minh City, Vietnam, May 24-27, 2017.

127. **Pal, N.** *Bayesian Predictive Inference with Applications in Economic Studies and Weather Prediction.* Mahidol University. Bangkok, Thailand, May 28-30, 2017.

128. **Pal, N.** *Applied Statistics for Engineers & Scientists.* Ho Chi Minh City University of Science. Ho Chi Minh City, Vietnam, December 4-8, 2017.

129. **Pal, N.** *Statistical Applications on Geographical Analyses.* Lady Brabourne College. Kolkata, India, December 19, 2017.

130. **Vatsala, A.S.** Special Session Chair, Invited, AMS Joint Mathematics Meeting. Atlanta, GA, January 4-7, 2017.

131. **Vatsala, A.S.** *Generalized Iterative Methods for Nonlinear Differential Equations.* Global Initiative of Academic Networks (GIAN), Grant jointly with A. Vijesh, Professor of Mathematics, IIT, Indore, gave a total of 12 lectures and conducted 8 tutorials, December 18-23, 2017.

132. **Wang, X-S.** *The dynamics of Poisson-Nernst-Planck systems.* Workshop on Wave Transport of Ionic Species, Fields Institute. Toronto, ON, Canada, August 28-September 1, 2017.

133. **Wang, X-S.** *Asymptotic expansion of orthogonal polynomials via difference equations.* International Conference on Special Functions: Theory, Computation, and Applications. City University of Hong Kong, Kowloon Tong, Hong Kong, June 2-5, 2017.

134. **Wang, X-S.** *Global dynamics a coupled epidemic model.* 2017 China-Canada International Conference on Disease Modelling. Shanghai University, Shanghai, China, June 2-5, 2017.

135. **Wang, X-S.** *Age-structure model with periodic mature probability.* 2017 Joint Mathematics Meetings, Atlanta, GA, January 4-7, 2017.

136. **Birkenmeier, G.** *π-Baer Rings.* Southern Regional Algebra Conference. Auburn University, Auburn, AL, March 18-20, 2016.

137. **Birkenmeier, G.** *π-Baer Rings.* 33rd Ohio State-Denison Mathematics Conference. Ohio State University, Columbus, OH, May 13-15, 2016.

138. **Browne, C.** *Modeling Contact Tracing and Targeted Control in Outbreaks.* ECMTB 2016. Nottingham, U.K., July 2016.

139. **Browne, C.** *Modeling the Ebola outbreak and contact tracing.* AIMS Conference on Dynamical Systems, Differential Equations and Applications. Orlando, FL, July 2016.
140. **Browne, C.** *Virus-Immune Dynamics in Structured HIV Models*. AIMS Conference on Dynamical Systems, Differential Equations and Applications. Orlando, FL, July 2016.
141. **Browne, C.** S*tability and Persistence in Multi-Epitope HIV-Immune Response Network Models.* Southeastern-Atlantic Regional Conference on Differential Equations. Ft. Myers, FL, November 2016.
142. **Chiquet, R.** *Accessing the Impact of Environmental Disasters on Population Dynamics using Stochastic Matrix Models.* LA/MS Regional MAA Meeting. LSUS, Shreveport, LA, February 2016.
143. **Chiquet, R.** *Accessing the Impact of Environmental Disasters on Population Dynamics Using Stochastic Matrix Models*. Gulf of Mexico Oil Spill Conference, Invited. Tampa, FL, September 2016.
144. **Deng, K.** *Competitive exclusion and coexistence in a two-strain pathogen model with diffusion*. 2016 NCTS International Workshop on Mathematical Biology. Hsinchu, Taiwan, May 21-23, 2016.
145. **Kearfott, R.B.** *Interval Arithmetic: Fundamentals, History, and Semantics.* BIRS Casa Oaxaca Seminar on Interval Analysis and Constructive Mathematics. Oaxaca, Mexico, November 13, 2016.
146. **Kim, S.** The 2nd Pacific Rim International Conference on Production Engineering and Big Data Science. Seoul National University, Seoul, South Korea, December 15-16, 2016.
147. **Kim, S.** Invited. Platinum Jubilee International Conference on Applications of Statistics. University of Calcutta, Kolkata, India, December 21-24, 2016.
148. **Krishnamoorthy, K.** *Statistical Methods for Workplace Exposure/Pollution Assessment*, Invited. Cameroon International Conference on Recent Development in Applied Statistics. Yaounde, Cameroon, March 14-18, 2016.
149. **Krishnamoorthy, K.** *A simple method for assessing occupational exposure via the one-way random effects model.* Joint Statistical Meetings 2016. Chicago, IL, July 30-August 4, 2016.
150. **Magidin, A.** *Algebraic closure operators on infinite subgroup lattices*. Zassenhaus Group Theory Conference. Adelphi University, Garden City, NY, May 2016.
151. **Pal, N.** 1st International Conference on Applied Mathematics in Engineering and Reliability (ICAMER 2016). Ton Duc Thang University, Ho Chi Minh City, Vietnam, May 4-6, 2016.
152. **Pal, N.** Statistics in Engineering: Reliability & Life Testing, Ho Chi Minh City University of Technology. Ho Chi Minh City, Vietnam, June 13-17, 2016.
153. **Pal, N.** One Day Symposium on Interdisciplinary Statistical Research. Kolkata, India, June 28, 2016.
154. **Pal, N.** Application of Statistics in Geography, Lady Brabourne College, Kolkata, India, July 18-19, 2016.
155. **Pal, N.** International Conference on Applied Mathematics hosted by Mahidol University (ICMA-MU 2016), Bangkok, Thailand, December 17-19, 2016.
156. **Pal, N.** Bayesian Predictive Inference. Mahidol University. Bangkok, Thailand, December 20, 2016.

157. **Salceanu, P.**, Kong J., & Wang H. *A Model for bacteria-grazers interactions in a chemostat.* The 11th AIMS Conference on Dynamical Systems, Differential Equations and Applications. Orlando, FL, July 1-5, 2016.

158. **Wang, X-S.** Joint Mathematics Meetings. Seattle, WA, January 6-9, 2016.

159. **Wang, X-S.** International Conference on Applied Mathematics. City University of Hong Kong, May 30-June 2, 2016.

160. **Wang, X-S.** *Mathematical Modelling and Computation in Medicine/Biology.* Yau Mathematical Sciences Center. Beijing, China, December 12-16, 2016.

161. **Ackleh, A.S.** *Competitive Exclusion and Coexistence in Population Models*, N.A. Court Lecture, Invited. MAA 77th Annual Meeting of the Oklahoma-Arkansas Section. Tulsa, OK, April 10-11, 2015.

162. **Ackleh, A.S.** *Understanding the Dynamics of Amphibians and Associated Diseased Using a Structured Modeling Approach*, Invited. 27th IFIP TC7 Conference. Sophia Tech Campus, Sophia Antipolis, France, June 29- July 3, 2015.

163. **Ackleh, A.S.** *A general structured population model with application to amphibians and associated diseases*, Invited. Joint Mathematical Meeting. San Antonio, TX, January 9-14, 2015.

164. **Chiquet, R.** *Coexistence and Competitive Exclusion in a Discrete Juvenile-Adult Model*, Invited. 9th International Conference on Differential Equations and Dynamical Systems for the special section Applicable Analysis and Applications. May 2015.

165. **Chiquet, R.** *Demographic Analysis of Sperm Whales Using Deterministic and Stochastic Models*, Invited. Seventh International Conference on Dynamic Systems and Applications & the Fifth International Conference on Neural, Parallel, and Scientific Computations. Atlanta, GA, May 2015.

166. **Davis, D.** *For the Ausoni-Rognes conjecture at n=1, p>3: A strongly convergent descent spectral sequence and some interrelated topics in the theory of discrete G-spectra: The spectrum X^{dis}_N, fibrancy, and homotopy fixed points*. University of Chicago. June 2, 2015.

167. **Davis, D.** *For G profinite and certain G-spectra: Comparing their discrete and profinite homotopy fixed points*. Penn State Altoona. Altoona, PA, November 6, 2015.

168. **Deng, K.** *Competitive exclusion and coexistence in a two-strain pathogen model with diffusion*. AMS Southeastern Special Session on New Developments in Population Dynamics and Epidemiology. Huntsville, AL, March 27-29, 2015.

169. **Kearfott, R.B.** *The Pending IEEE Standard on Interval Arithmetic: Implications for the Global Optimization Community*. World Conference on Global Optimization 2015 (WCGO 2015). Gainesville, FL, February 23, 2015.

170. **Krishnamoorthy, K**. *Prediction intervals and tolerance intervals for binomial and Poisson distributions*. International Conference on Statistics 2015: Theory to Practice. Jimma University, Jimma, Ethiopia. March 16-18, 2015.

171. **Magidin, A.** *The lattice of closure operators on a subgroup lattice: The finite case and open questions*. 2015 Zassenhaus Meeting. SUNY Binghamton, Binghamton NY, May 22-24 2015.

172. **Ng, P.** *Purely infinite corona algebra*. Canadian Mathematical Society Meeting. Charlottetown, PE, Canada, June 4-7, 2015.

173. **Rogers, C.** *What do homotopy algebras form*? Special Session on Cohomology of Algebras and Deformation Theory, AMS 2015 Fall Central Sectional Meeting. Chicago, IL, October 2015.

174. **Rogers, C.** *Equivariant cohomology and homotopy moment maps*. Program on Higher Structures in String Theory and Quantum Field Theory, Erwin Schroedinger Institute for Mathematics and Physics. Vienna, Austria, December 2015.

175. **Sutton, K.** *Mathematics as an Interdisciplinary Tool in 2 Examples: (i) Dynamics of* Mycobacterium marinum *Infections, and (ii) Invasive Species Population Dynamics*. Sciences Interdisciplinary Monthly Meeting. November 24, 2015

176. **Vatsala, A.S.** *Some Basic Results of Caputo Fractional Differential Equations*. Special session at Joint Mathematics Meetings of AMS and MAA. San Antonio, TX January 10-13, 2015.

177. **Ackleh, A.S.** *A Structured Model for the Spread of* Mycobacterium marinum. The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications. Madrid, Spain, July 7-11, 2014.

178. **Ackleh, A.S.** *A Structured Model forthe Transmission Dynamics of Mycobacterium Marinum Between Aquatic Animals*. SIAM Conference on the Life Sciences. Charlotte NC, August 4-7, 2014.

179. **Birkenmeier, G.** *Idempotents in Generalized Matrix Rings*. Southern Regional Conference, Auburn University. Montgomery, AL, April 25-27, 2014.

180. **Birkenmeier, G.** *Idempotants in Generalized Matrix Rings*. 32nd Ohio State-Denison Mathematics Conference. Ohio State University, Columbus, OH, May 9-11, 2014.

181. **Chiquet, R**. *Chaos and Persistence in a Two Stage Ecological Model.* LA/MS Regional MAA Meeting. Louisiana State University, Baton Rouge, LA, March 2014.

182. **Davis, D.** *How Much Structure Does the Continuous Action of the Morava Stabilizer Group Possess?* and *Mini-Symposium on Topology and Dynamical Systems*. 38th Annual SIAM Southeastern Atlantic Section Conference at Florida Institute of Technology. Melbourne, FL, March 30, 2014.

183. **Deng, K.** *Asymptotic behavior for a reaction-diffusion population model with delay*. The Workshop on Mathematical Biology and Nonlinear Analysis, University of Miami. Miamai, FL, December 19-21, 2014.

184. **Krishnamoorthy, K.** *Environmental Data Analysis Using Gamma Distribution*. Dakar International Conference on Recent Developments in Applied Statistics. Dakar, Senegal, March 17-21, 2014.

185. **Krishnamoorthy, K.** *Tolerance Intervals with Applications*. Dakar International Conference on Recent Developments in Applied Statistics. Dakar, Senegal, March 17-21, 2014.

186. **Ng, P.** *Commutators in C_r*F_∞*. Special Session on Progress in Noncommutative Analysis of the American Mathematical Society Sectional Meeting at the University of New Mexico. Albuquerque, NM, April 4-6, 2014.

187. **Ng, P.** *Simple C*-algebras with quasicontinuous scale*. Conference on Classification, Structure, Amenability and Regularity. University of Glasgow, Glasgow, Scotland, UK, August 29-September 6, 2014.

188. **Robert Gonzalez, L.** *Dynamics and C*-algebras: Amenability and soficity*. Banff, Canada, October 20-24, 2014.

189. **Salceanu, P.** *Competitive Exclusion and Coexistence in an n-Species Ricker Model*. The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications. Madrid, Spain, July 7-11, 2014.

190. **Salceanu, P.** *On a Discrete Selection-Mutation Model: Competitive Exclusion and Uniform Persistence*. The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications. Madrid, Spain, July 7-11, 2014.

191. **Sutton, K.L.** *Mechanism Elucidation in Intracellular Signaling Models via Sensitivity Functions*. SIAM Life Sciences Annual Meeting. Charlotte, NC, August 2014.

192. **Vatsala, A.S.** *Sub and Super hyperbolic linear partial fractional differential equations with numerical results*. The Joint Mathematics Meeting (AMS-MAA). Baltimore, MD, January 15-18, 2014.

193. **Ackleh, A.S.** *Finite Difference Approximations for Measure-Valued Solutions of a Hierarchically Size-Structured Population Model*. The Fourth International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems. Lubbock, TX, October 4-6, 2013.

194. **Ackleh, A.S.** *Stability Analysis of Small Perturbations of Pure Selection Models on Measure Spaces* (Open Problem Lecture). Modeling with Measure: From Structured Populations to Crowd Dynamics. Leiden, Netherlands, August 26-30, 2013.

195. **Ackleh, A.S.** *Measure-Valued Solutions to Selection-Mutation and Structured Population Models* (Tutorial Lecture). Leiden, Netherlands, August 26-30, 2013,

196. **Birkenmeier, G.F.** *When is a Sum of Annihilator Ideals an Annihilator Ideal?* Southern Regional Algebra Conference. Southeastern Louisiana University, Hammond, LA, March 15-17, 2013.

197. **Chiquet, R**. *Chaos in a Two-stage Ecological Model, New Trends in Differential and Difference Equations*. University of Tennessee at Chattanooga. Chatanooga, TN, March 2013.

198. **Chiquet, R.** *Coexistence and Competitive Exclusion in a Discrete Juvenile-Adult Model*. LA/MS Regional MAA Meeting. University of Southern Mississippi, Hattiesburg, MS, March 2013.

199. **Davis, D.** *Homotopy Fixed Points for Profinite Groups Emulate Concretely Those for Discrete Groups*. Geometry & Topology Seminar, Tulane University. New Orleans, LA, October 8, 2013.

200. **Deng, K.** *Sensitivity Analysis for a Nonlinear Size-structured Population Model*. The Fourth International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems. Lubbock, TX, October 4-6, 2013.

201. **Krishnamoorthy, K.** *Modified Large Sample Methods with Applications*. University at Buffalo. Buffalo, NY, April 11, 2013.

202. **Ng, P.** *The Corona Algebra of the Stabilized Jiang-Su algebra*. University of Toronto. Toronto, ON, Canada, May 27-31, 2013.

203. **Ng, P.** *C*-algebras, structures and classification*. Jilin University. Changchun, China, July 22-27, 2013.

204. **Ng, P.** *Sums of projections in certain simple purely infinite C*-algebras*. University of Waterloo. Waterloo, ON, Canada, November 24-29, 2013.

205. **Leon-Novelo, L.** *A Bayesian Analysis of Bioassay Experiments*. The 2013 Annual Meeting of the WNAR/IMS. Los Angeles, CA, June 16-19, 2013.

206. **Niebrzydowski, M.** *Knots with Binary Relations*. AMS Meeting. Riverside, CA, November 2-3, 2013.
207. **Niebrzydowski, M.** *Knots with Binary Relations and Their Categorical Generalization*. Geometry and Topology Seminar, Tulane University. New Orleans, LA, November 19, 2013.
208. **Pal, P.** International Conference in Mathematics & Applications. Mahidol University, Thailand, January 19-21, 2013.
209. **Pal, P.** International Conference on Advanced Computing and Applications. Ho Chi Minh City, Vietnam, October 23-25, 2013.
210. **Sutton, K.L**. *Structured Models for the Transmission Dynamics of* Mycobacterium marinum. The Fourth International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems. Texas Tech University, Lubbock, TX, October, 2013.
211. **Vatsala, A.S.** *R. Lioville and Caputo Fractional Differential and Integral Inequalities*. New Trends in Differential and Difference Equations. Chattanooga, TN, March 15-16, 2013.
212. **Vatsala, A.S.** *Numerical Methods for Fractional Differential Equations via Generalized Monotone Method*. AMS Joint Mathematics Meeting. San Diego, CA, January 9-12, 2013.
213. **Vatsala, A.S.** *Sub Hyperbolic Linear Partial Fractional Differential Equation in One Dimensional Space with Numerical Results*. AMS Regional Meeting. Washington University, St, Louis, MO, October 18-20, 2013.

Contributed Talks

1. **Hackney, P.** *Right adjoints to operadic restriction functors.* Special Session on Applied Category Theory, AMS Western Sectional Meeting, University of California, Riverside, November 9–10, 2019.
2. **Hackney, P.** *Right adjoints to operadic restriction functors*. Category Theory 2019, University of Edinburgh, July 7–13, 2019.
3. **Hackney, P**. *A Graph Category for Higher Modular Operads*. Workshop on Functor Calculus, Columbus, OH, March 16-17, 2019.
4. **Kim, S.** *An Asymptotic Conditional Test of Independence in Bernoulli Sequences Using the Number of Runs Given the Number of Success*, Lloyd Roeling UL Lafayette Mathematics Conference, Lafayette, LA October 25. 2019.
5. **Koytcheff, R.** *A Morse-theoretic approach to the space of unlinks*, KaBiN (Knots and Braids in Norway), NTNU, May 2019.
6. **Koytcheff, R.** *The Taylor tower for the space of knots and finite-type invariants,* Workshop on Functor Calculus, The Ohio State University, March 2019
7. **Li, L.** *Stable and Accurate Numerical Methods for a Generalized Kirchhoff-Love Plate Model*, Scientific Computing Around Louisiana (SCALA) Baton Rouge, LA, February, 2020.
8. **Li, L.** *Recent Advance on Extending the Added-Mass Partitioned (AMP) Scheme for Solving FSI Problems Coupling Incompressible Flows with Elastic Beams to the 3D*

Regime, Minisymposium talk at the SIAM Texas-Louisiana Sectional Meeting Dallas, TX, November, 2019

9. **Li, L**. *Numerical Methods for Thermally Stressed Shallow Shell Equations*, Contributed talk at SIAM Conference on Computational Science and Engineering (CSE), Spokane, WA, March, 2019.

10. **Li, L.** *Extending the Added-mass Partitioned (AMP) Scheme for Solving FSI Problems Coupling Incompressible Flows with Elastic Beams to 3D,* Minisymposium talk at SIAM Conference on Computational Science and Engineering (CSE) Spokane, WA, February, 2019.

11. **Li, L.** *An Efficient Finite-Element Algorithm for Incompressible Navier-Stokes Equations with High-Order Accuracy up-to the Boundary,* Scientific Computing Around Louisiana (SCALA), New Orleans, LA, February, 2019.

12. **Magidin, A**. The Chermak-Delgado lattice of a 2-nilpotent product. Preliminary (negative results). Contributed paper in Group Theory, Joint Annual Meeting of the AMS and the MAA, Batimore, MD, January 2019.

13. **Sang, Y.** *Jackknife Empirical Likelihood Approach for K-sample Tests via Energy Distance*, Symposium on Data Science and Statistics, Bellevue, WA, May 2019.

14. **Veprauskas, A.** *A nonlinear continuous-time model for a semelparous species*, Fifth International Conference on Computational and Mathematical Population Dynamics, Fort Lauderdale, FL, May 24, 2019.

15. **Gulbudak, H**. *A Multi-Scale Model for Vector-Borne Diseases*. Scientic Computing Around Louisiana (SCALA) Conference, Louisiana State University. Baton Rouge, LA, February, 2018.

16. **Kearfott, B.** *Ideas and Rational for Hybrid Interval / Fuzzy Branch and Bound Algorithms*, contributed talk with refereed abstract. SCAN 2018. Tokyo, Japan. September 12, 2018.

17. **Kim, S.** *Model-based clustering method of spherical data*. The 4th International Conference on Big Data and Information Analytics. Houston, TX, December 20, 2018.

18. **Kim, S.** *On the Number of Unobserved and Observed Categories When Sampling from a Multivariate Hypergeometric Population*. Summer Research Conference of the Southern Regional Council on Statistics. Old Dominion University, Norfolk, VA, June 5, 2018.

19. **Kim, S.** *An Improved Meta-analysis for Analyzing Cylindrical-type Time Series Data with Applications to Forecasting Problem in Environmental Study*. Department of Statistics, University of Calcutta. Kolkata, India, January 8, 2018.

20. **Koytcheff**, **R.** *Graph complexes, formality, and configuration space integrals for spaces of braids.* Manifolds, Groups, and Homotopy. Isle of Skye, Scotland, June 21, 2018.

21. **Lynd, J.** *The Benson-Solomon fusion systems*. Zassenhaus Groups and Friends Conference. Tampa, FL, April 6, 2018.

22. **Lynd, J.** *The Benson-Solomon fusion systems*. Southern Regional Algebra Conference. Montgomery, AL, May 20, 2018.

23. **Magidin, A.** *The lattice of algebraic closure operators on infinite subgroup lattice*, Contributed talk in Group Theory. Joint Meeting of the AMS and the MAA. San Diego, CA, January 2018.

24. **Kim, S**. *Multivariate Circular Distributions and Test of Independence*. Indian Statistical Institute. Kolkata, India, December 23, 2017.K

25. **Kim, S**. *Multivariate and Multiple Circular Regression.* World Statistics Conference, July 22, 2017.

26. **Kim, S**. *Multivariate and Multiple Circular Regression.* Indian Statistical, Institute. Kolkata, India, January 3, 2017.

27. **Krishnamoorthy, K.** *Highest Posterior Mass Prediction Intervals for Binomial and Poisson Distributions*. Joint Statistical Meetings 2017. Baltimore, MD, July 29-August 3, 2017.

28. **Magidin, A**. *When is the lattice of closure operators on a subgroup lattice again a subgroup lattice?* Groups St Andrews in Birmingham. Birmingham, UK, August 2017.

29. **Beaulieu P.** *Strengthening Teacher Education with Mathematics & Science Scholars (STEMS²)*. LA/MS 2016 Section Meeting at LSU Shreveport. Shereveport, LA, February 26, 2016

30. **Beaulieu P.** *Mathematics Masters in the Middle (LaM³): Mining for Hidden Potential*. Southeast Regional Robert Noyce Connections Conference, University of South Alabama CISSTEM. Mobile, AL, June 3, 2016.

31. **Kearfott, R.B.** *Tools for Simplicial Branch and Bound in Global Optimization*. SCAN 2016. Uppsala, Sweden, September 27, 2016.

32. **Kim, S.** *Spherical Clustering in Big Data Analytic*. Department of Statistics, Seoul National University. Seoul, South Korea, December, 21, 2016.

33. **Pal, N**. *On Improved Estimation under Weibull Model.* Louisiana Chapter of the American Statistical Association Spring 2016 Meeting. LSU, Baton Rouge, LA, April 22, 2016.

34. **Pal, N**. *A Revisit to Test the Equality of Variances of Several Populations*. Louisiana Chapter of the American Statistical Association Fall 2016 Meeting. LSU-HSC, New Orleans, LA, November 18, 2016.

35. **Roy, J.** & **Myers M.** *Projects in Elementary Statistics*. 2016 LA/MS Regional MAA Meeting. LSU Shreveport, Shreveport, LA, February 27, 2016.

36. **Chiquet, R**. *Chaos in a Two-Stage Discrete Model with Periodic Birthrates* (Speaker). Joint Mathematics Meetings. San Antonio, TX, January 2015.

37. **Chiquet, R.** Workshop to assess the effects that Navy exercises may have on sperm whale and beaked whale populations, Invited Panel Expert (One of about 15 people from around the world to be asked to attend this meeting). Office of Naval Research Marine Mammals & Biology Programme and the US Navy. NOAA, the Marine Mammal Commission, the Office of Naval Research, the US Navy. Washington, DC. April 2015

38. **Davis, D**. *For the Ausoni-Rognes conjecture at n=1, p>3: A strongly convergent descent spectral sequence*. Lehigh University Geometry, Topology Conference. Bethlehem, PA, May 24, 2015.

39. **C.S. Langley**, **Roy, J.**, & A. Leonard. *Achieving a Successful Online STEM Class*. University of Louisiana at Lafayette Engaged Student Learning Retention Summit. Lafayette, LA, March 24, 2015.

40. **Roy, J.** and **C.S. Langley**. *Benefits and Obstacles in Teaching Online Math/Stat Undergraduate Courses*. 2015 MAA (Mathematical Association of America)

Louisiana/Mississippi Section Meeting at the University of Southern Mississippi Gulf Park Campus. Long Beach, MS, February 28, 2015.

Journal Referees

- **Ackleh, A.S.**: SIAM Journal of Applied Mathematics, Journal of Mathematical Biology, Journal of Mathematical Analysis and Applications, Natural Resource Modeling, Mathematical Biosciences, Dynamics of Discrete, Continuous and Impulsive Systems, Nonlinear Analysis, Theory Methods and Applications, Dynamic Systems and Applications, Journal of Computational and Applied Mathematics, International Journal of Mathematics and Mathematical Sciences, Kybernetika, Applied Mathematics Letters, Applicable Analysis, Journal of Biological Systems, Rocky Mountain Journal of Mathematics, Journal of Biological Dynamics, International Journal of Numerical Analysis and Modeling, Applied Mathematics and Computation, Inverse Problems in Science and Engineering, Journal of Difference Equations and Applications, Discrete and Continuous Dynamical Systems Series B, Mathematical Biosciences and Engineering, Computers and Mathematics with Applications, Journal of Theoretical Biology, Journal of Scientific Computing, Applied Numerical Mathematics.
- **Birkenmeier, G.F**: Beitrage zur Algebra and Geometrie, Algebras and Representation Theory, Journal of Algebra, Journal of Pure and Applied Algebra, Journal of Algebra and Its Applications, Communications in Algebra, Linear Algebra and Its Applications, Houston Journal of Mathematics, Glasgow Mathematical Journal, Acta Mathematica Hungarica, Turkish Journal of Mathematics, Kyungpook Mathemathical Journal, Tamkang Journal of Mathematics.
- **Browne, C.J.**: Theoretical Population Biology, BMC Medicine, Journal of Biology Dynamics, PLOS One, Nature Scientific Reports, SIAM Journal of Applied Mathematics, Journal of Theoretical Biology, Mathematical Biosciences, Mathematical Biosciences and Engineering, Journal of Biological Systems, Journal of Mathematical Biology, Applicable Analysis, Computational Methods for Differential Equations, Nonlinear Analysis: Real World Applications, Bulletin of Mathematical Biology.
- **Chiquet, R.**: Journal of Mathematical Biology, Methods in Ecology and Evolution. Endangered Species Research, Bulletin of Mathematical Biology, Mathematical Biosciences and Engineering.
- **Davis, D.**: Topology and its Applications, Compositio Mathematica,Turkish Journal of Mathematics, Homology, Homotopy and Applications, Journal of Pure and Applied Algebra, refereed a paper submitted to the proceedings volume "Surveys around Ohkawa's Theorem on Bousfield Classes," which was in preparation for the book series "Springer Proceedings in Mathematics and Statistics" (this book series is published by Springer).
- **Deng, K.**: Journal of Differential Equations, Nonlinear Analysis, Bulletin of the Malaysian Mathematical Sciences Society, Neural Computing and Applications, Abstract and Applied Analysis, Journal of Integral Equations and Applications, Computers and Mathematics with Applications, American Mathematical Society Mathematical Reviews, Advanced Nonlinear Studies, Applicable Analysis, Applied Mathematics - A Journal of Chinese Universities, Applied Mathematics Letters, Differential Equations and

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Applications, Discrete and Continuous Dynamical Systems, Series B, Journal of Biological Dynamics, Journal of Mathematical Analysis and Applications, Lecture Notes in Mathematics, Mathematical and Computer Modeling, Mathematical Reviews, Publicationes Mathematicae, Science in China, Journal of Elliptic and Parabolic Equations, SIAM Journal on Applied Mathematics, Numerische Mathematik, Zeitschrift fur Angewandte Mathematik und Physik.

- **Gulbudak, H.**: Bulletin of Mathematical Biology, Journal of Biological Dynamics, Journal of Biological Systems, Mathematical Biosciences, Differential and Integral Equations Journal, Journal of Mathematical Biology, PLOS ONE, Theory in Biosciences, Bulletin of Mathematical Biology, Ecological Complexity, Scientific Reports, ISMEJ.**Hackney, P.**: Involve, a Journal of Mathematics, Applied Categorical Structures, Pacific Journal of Mathematics, Algebraic & Geometric Topology, Applied Categorical Structures, Notices of the American Mathematical Society.

- **Kearfott, R.B.**: Journal of Computational and Applied Mathematics, Applied Mathematics and Computation, Granular Computing, RAIRO Operations Research, ACM Transactions on Mathematical Software, Journal of Global Optimization, BIT (Scandinavian journal on numerical analysis).

- **Kim, S.**: Biometrika, Journal of Statistical Computation and Simulation, Statistical Papers, Statistical Methodology, Journal of Applied Statistics, Sankhya A, The European Journal of Finance, Environmental and Ecological Statistics.

- **Koytcheff, R.**: Journal of Topology and Analysis, Involve, American Mathematical Monthly, Algebraic and Geometric Topology, Journal of Physics A: Mathematical and Theoretical, Journal of Knot Theory and Its Ramifications.

- **Krishnamoorthy, K.**: , Statistics in Medicine, Computational Statistics, Communications in Statistics – Theory and Methods, Metrika, Journal of Applied Statistics, Technometrics, Journal of Statistical Computation and Simulation, Journal of Quality Technology, Journal of Multivariate Analysis, Journal of Statistical Theory and Practice, Sankhya.

- **Li, L.**: International Journal for Numerical Methods in Engineering, Applied Mathematical Modelling, Journal of Computational Science, Mathematical Methods in the Applied Sciences, Physics of Fluids.

- **Lynd, J.**: Symmetry, Integrability, and Geometry: Methods and Applications (SIGMA), Journal of the London Mathematical Society, Journal of Algebra, Proceedings of the London Mathematical Society, Journal of Pure and Applied Algebra, Journal of Algebra and Its Applications, Mathematishe Zeitschrift, Communications in Algebra, Journal of Group Theory, College Mathematics Journal, Springer Undergraduate Texts in Mathematics.

- **Magidin, A.**: International Journal of Algebra and Computation, Journal of Pure and Applied Algebra, Comptes Rendus Mathematique, Publicationes Mathematicae, Ars Combinatorica, Algebra Colloquium, Canadian Mathematical Bulletin, Israel Journal of Mathematics, International Journal of Algebra and Applications, Southeast Asian Bulletin of Mathematics, Semigroup Forum, Journal of Group Theory, Communications in Algebra, Journal of Algebra, Malaysian Journal of Science, Studia Logica, Proceedings of the AMS, Glasgow Journal of Mathematics, Forum Mathematicum, International Electronic Journal of Algebra, Journal Advanced Research in Pure Mathematics, Journal of the Australian Mathematical Society and Proceedings volumes,

American Mathematical Society Mathematical Reviews, Journal of Advanced Research in Pure Mathematics, Colloquium Mathematicum, Communications of the Korean Mathematical Society, Sains Malaysiana, CGASA, Journal of Algebra and its Applications, Publicationes Mathematicae Debrecen, Bulletin of the Malaysian Mathematical Society, Hacetteppe Journal of Mathematics and Statistics.

- **Ng, P.**: Bulletin of the Canadian Mathematical Society, Bulletin of the Malaysian Mathematical Sciences Society, Canadian Journal of Mathematics, Illinois Journal of Mathematics, Journal of Operator Theory, Missouri Journal of Mathematical Sciences.
- **Niebrzydowski, M.**: Journal of Knot Theory, Fundamenta Mathematicae, Experimental Mathematics, Topology and Its Applications, AMS Contemporary Mathematics Series, American Mathematical Society Mathematical Reviews, Zentralblatt.
- **Pal, N.**: Journal of Statistical Planning & Inference, Computational Statistics, Journal of the Indian Statistical Association, Journal of the Thailand Statistical Association, Journal of Statistical Theory and Practice, Journal of Statistical Simulation & Computation, Computational Statistics & Data Analysis, Communications in Statistics, Sankhya - The Indian Journal of Statistics, The Annals of the Institute of Statistical Mathematics, The American Statistician, Statistical Papers, Statistics, Journal of Multivariate Analysis, The Annals of Statistics, Communications in Statistics - Computations & Simulations, Thai Statistician, The Brazilian Journal of Probability & Statistics.
- **Robert, L.**: Journal of Operator Theory, Advances in Mathematics.
- **Rogers C.**: Journal of Differential Geometry.
- **Salceanu, P.**: Journal of Mathematical Biology, Mathematical Biosciences and Engineering, Journal of Biological Dynamics, International Journal of Biomathematics, American Mathematical Society Mathematical Reviews, Journal of Difference Equations and Applications, Mathematical Biosciences, Math Reviews.
- **Sang Y.**: Journal of the American Statistical Association, Test, Electronic Journal of Statistics, Mathematical Reviews, Journal of Applied Statistics, Journal of Nonparametric Statistics, Journal of Statistical Computation and Simulation, Communications in Statistics, Linear Algebra and its Applications, Electronic Journal of Statistics, Statistics and Probability Letters, Biometrical Journal, the Journal of Economic Inequality.
- **Vatsala, A.S.**: Fractals, Journal of Combinatorics Information and Systems Sciences (JCISS), Journal of Mathematics, FILOMAT, Neural Computing and Applications (NCAA), International Journal of Differential Equations, Nonlinear Dynamic Systems Theory and Dynamic Systems and Applications, Applicable Analysis and Discrete Mathematics, Mathematical reviews, Dynamic Systems and Applications, Nonlinear Dynamic Systems, Neural, Parallel and Scientific Computation, International Journal of Biomathematics, Abstract and Applied Analysis-Hindawi, Applied Mathematical Modeling, Communications in Applied Analysis, Mathematical Reviews Nonlinear Analysis: Theory, Methods & Applications, Journal of Mathematical Analysis and Applications, Nonlinear Analysis: Real World Applications, Nonlinear Analysis: Hybrid Systems, Applied Mathematics Letters, Dynamic Systems and Applications, Computers and Mathematics with Applications, Advances in Difference Equations, Journal of Applied Analysis, Journal of Applied Mathematics and Computation, Korean Mathematical Society Journal, Nonlinear Waves, Elsevier, Indagationes Mathematicae
- **Veprauskas A.**: PeerJ, Ecotoxicology, Journal of Biological Dynamics, Mathematical Biosciences and Engineering, Natural Resource Modeling.

- **Wade, B.A.**: International Journal of Computer Mathematics, Journal of Computational and Applied Mathematics.
- **Wang, X-S.**: Advances in Difference Equations, Advances in Mathematics, Applicable Analysis, Infectious Disease Modelling, International Journal of Dynamical Systems and Differential Equations, International Journal of Numerical Analysis and Modeling, Journal of Approximation Theory, Journal of Biological Systems, Journal of Mathematical Analysis and Applications, Journal of Mathematical Physics, Nonlinear Analysis Series B: Real World Applications, Proceedings of the American Mathematical Society, Discrete and Continuous Dynamic Systems - Series B, International Journal of Nonlinear Sciences and Numerical Simulation, Mathematical Biosciences and Engineering (2 papers), Nonlinear Analysis: Real World Applications, Osong Public Health and Research Perspectives, Applied Mathematical Modelling, Canadian Mathematical Bulletin, Computational Optimization and Applications, Rocky Mountain Journal of Mathematics.

Organized Special Sessions or Conferences

- **Hackney, P.** Conference Co-organizer (with Horel, G. & Robertson, M.) Operad Pop-Up. (operads.com) a 24-hour long, world-wide, online conference on operad theory and its applications, supported by the mathematical research institute MATRIX, August 2020.
- **Magidin, A.** Co-organizer, 2020 Zassenhaus Group Theory and Friends Virtual Conference, May 29-30 and June 5-6, 2020.
- **Wang, X.-S.** Organizer of Mini-Symposium "Dynamical Systems and Mathematical Biology", SIAM Texas-Louisiana Sectional Meeting, Texas A&M University, October 16-18, 2020.
- **Wang, X.-S.** Co-Organizer (with Zhang, A.) Special Session "Differential and Difference Equations in Biological Dynamics", 2020 Joint Mathematics Meetings, Denver, Colorado, January 15-18, 2020.
- **Browne, C.** Member of scientific committee for 4th International Conference on Computational Mathematics and Engineering Sciences (CMES-2019), Antalya, Turkey, April 20 - 22, 2019.
- **Gulbudak, H.** Co-organizer (with Asik,l & Macdonald, C), Mini-sympsium titled "Modeling Population Dynamics in Ecology and Epidemiology I-II", T**he 2nd Annual Meeting of SIAM Texas-Louisiana Section, Dallas, TX, November 1-3, 2019.**
- **Gulbudak, H.** Organizer, Minisymposium titled "Modeling Infection Dynamics Across the Scales," **The 5th International Conference on Computational & Mathematical Population Dynamics**, Florida Atlantic University, Fort Lauderdale, FL, May 19-24, 2019.
- **Li, L.** Co-organizer, Minisymposium titled "High-order accurate numerical methods for fluid-structure interaction problems", SIAM Conference on Computational Science and Engineering (CSE19), Spokane, Washington, February, 2019.
- **Lynd, J.** Co-organizer (with Birkenmeier, Magidin, A. & Ng, P.), Southern Regional Algebra Conference,UL at Lafayette, LA April 2019.

- **Lynd, J**. Co-Organizer, (with Kappe, L. & Magidin, A.) American Mathematical Society Eastern Sectional Meeting Special Session "What's new in Group Theory?", Binghamton University, Binghamton, NY, October 2019.
- **Magidin, A**. Co-organizer, Special Session "What's New in Group Theory" Sectional Meeting of the American Mathematical Society, Binghamton, NY, October 2019.
- **Magidin, A**. Co-organizer, Zassenhaus Group Theory and Friends Conference, Binghamton, NY, May 2019.
- **Magidin, A.** Co-organizer, Southern Regional Algebra Conference, UL Lafayette, April 2019.
- **Berry, C.**: Co-Organizer, Louisiana American Statistical Association Chapter meeting, Louisiana State University, Baton Rouge, LA, November 9, 2018.
- **Chiquet, R.**: Conference Organizer, 2018 LA/MS MAA Section Meeting, University of Louisiana, Lafayette, March 1-3, 2018.
- **Gulbudak, H.**: Co-Organizer (with Hyman, Mac), Mathematical Modeling in Ecology and Epidemiology I & II. 1st Annual Meeting of SIAM Texas-Louisiana Section, Baton Rouge, LA, October 5-7, 2018
- **Li, L.**: Organized a professional Minisyposium titled "high-order accurate numerical methods for multi-physics problems," 1st Annual Meeting of SIAM Texas-Louisiana Section, Louisiana State University, Baton Rouge, LA, October 5-7, 2018.
- **Lynd, J.**: Co-organizer (with Hung Ngoc Nguyen) of the special session "Structure and representation theory of finite groups" at the AMS Central Sectional Meeting, Ohio State, Columbus, OH, March 17-18, 2018.
- **Magidin, A.**: Co-Organizer, Zassenhaus Group Theory and Friends Conference, Tampa, FL, April 5-8, 2018.
- **Robert, L.**: Primary Organizer of the Miniworkshop on the Cuntz semigroup, Univeristy of Houston, Summer 2018.
- **Vatsala, A.S.**: AMS Joint Mathematics meeting San Diego, CA, Organized and Chaired a special Session on "Fractional, Hybrid and Stochastic Dynamic Systems with Applications," January 10-13, 2018.
- **Wang, X.-S.**: Co-Organizer (with A. Lopez-Garcia) Special Session on Orthogonal Polynomials and Applications, Joint Mathematics Meetings, San Diego, CA, January 10, 2018.
- **Wang, X.-S.**: Co-Organizer (with Y. Lou, H. Shu and X. Wu) Special Session on Dynamical Systems with Applications to Population Biology, The 12th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Taipei, Taiwan, July 5-8, 2018.
- **Wang, X.-S.**: SIAM Texas-Louisiana Sectional Meeting, Louisiana State University, Organizer of Mini-Symposium on Modeling, Analysis, and Computation in Mathematical Biology, October 5-7, 2018.
- **Wang, X.-S.**: Co-Organizer (with C. Ou) Special Session on Asymptotic Analysis and Applications, Canadian Mathematical Society Winter Meeting, Vancouver, Canada, December 7-10, 2018.
- **Davis, D.**: member of the Organizing Committee for the International Conference Homotopy Theory: Tools and Applications. University of Illinois, Urbana-Champaign, IL, July 17-21, 2017.

- **Davis, D.**: Co-Organizer of the Lloyd Roeling University of Louisiana at Lafayette Topology Conference. November 10-12, 2017.
- **Davis, D.**: Organizer, Topology Seminar. University of Louisiana at Lafayette, Fall 2017.
- **Magidin, A.**: Co-organizer, Zassenhaus Group Theory and Friends Conference. Binghamton University, Binghamton, NY, May 2017.
- **Vatsala, A.S.**: Organized Special Session at the AMS Joint Mathematics Meeting. Atlanta, GA, January 4-7, 2017
- **Wang, X-S.**: Co-Organizer (with Yanyu Xiao) of Special Session on Analytical and Computational Studies in Mathematical Biology, 2017 Joint Mathematics Meetings. Atlanta, Georgia, January 4-7, 2017.
- **Ackleh, A.S.**: Co-organizer of the special session on Fusion of Bio-physical Data and Predictive Modeling to Understand Gulf of Mexico Marine Species Resilience to Environmental Stresses and Disasters, Gulf of Mexico Oil Spill and Ecosystem Science Conference. Tampa, FL, February 1-4, 2016.
- **Kearfott, R.B.**: Member of Scientific Committee, SCAN 2016, Uppsala University. Uppsala, Sweden, September 2016.
- **Kearfott, R.B.**: Program Committee, BIRS Workshop on Interval Analysis and Constructive Mathematics. Oaxaca, Mexico, Nov. 2016.
- **Magidin, A.**: Co-organizer of Special Session on "What's New in Group Theory?" Annual Joint Meeting of the American Mathematical Society and the Mathematical Society of America. Seattle, WA, January 2016.
- **Vatsala, A.S.**: Arranged and Chaired the special session on "Analysis of Fractional Differential, Integral and Difference Equations with Applications," World Congress: 11th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences. LaRochelle, France, July 05-08, 2016.
- **Wang, X-S.**: Organizer of Special Session on Recent Advances in Orthogonal Polynomials and Special Functions, Joint Mathematics Meetings. Seattle, WA, January 6-9, 2016.
- **Wang, X-S.**: Co-Organizer of Special Session on Differential Equations and Applications to Biological Models, The 11th AIMS Conference on Dynamical Systems, Differential Equations and Applications. Orlando, FL, July 1-5, 2016.
- **Wang, X-S.**: Co-Organizer of Lloyd Roeling Mathematics Conference, University of Louisiana at Lafayette. November 11-13, 2016.
- **Birkenmeier, G.F.**: Co-organizer of NSF/CBMS Conference, Classification of C*-Algebra, Flow Equivalance of Shift Spaces, Graph and Leavitt Path Algebras. University of Louisiana, Lafayette, May 11-15, 2015.
- **Birkenmeier, G.F.**: Co-organizer of Southern Regional Algebra Conference (Lloyd Roeling Conference). University of Louisiana, Lafayette, March 13-15, 2015.
- **Chan, C.Y.**: Organizer and Chair of the Workshop on Recent Advances in Applied Analysis and Applications for the Seventh International Conference on Dynamic Systems and Applications. Atlanta, GA, May 27-30, 2015.
- **Chan, C.Y.**: Organizer and Chair of the Special Session on Applicable Analysis and Applications for the 9th International Conference on Differential Equations and Dynamical Systems. Dallas, TX, May 14-16, 2015.

- **Davis, D.**: Organizing Committee for the NSF-sponsored Conference, Classification of C*-algebras, flow equivalence of shift spaces, and graph and Leavitt path algebras. University of Louisiana at Lafayette, May 11-15, 2015.
- **Davis, D.**: Organizer, Math Department Topology Seminar. Spring 2015 University of Louisiana at Lafayette.
- **Davis, D.**: Organizer, Math Department Topology Seminar. Fall 2015, University of Louisiana at Lafayette.
- **Magidin, A.**: Co-organizer of Special Session on "What's New in Group Theory?" Annual Joint Meeting of the American Mathematical Society and the Mathematical Society of America. San Antonio, TX, January 2015.
- **Vatsala, A.S.**: Special session on Fractional, Stochastic and Hybrid Dynamic Systems, at Joint Mathematics Meetings of AMS and MAA. San Antonio, TX, January 10-13, 2015.
- **Vatsala, A.S.**: Workshop on Analysis and Numerical Methods of Nonlinear Dynamic Systems and Applications, at the joint meeting of The Seventh International conference on Dynamic Systems and Applications and Fifth International Conference on Neural, Parallel, and Scientific Computations. Morehouse College, Atlanta, GA, May 27-30, 2015.

Ph.D. Students Who Graduated

*denotes students who have received support from external grants.

2020
- Bai, Yunxiang ( ) Advisor: **A.S. Vatsala**
- Nguyen Thuy, Ngan Hoang, ( ) Advisor: **K. Krishnamoorthy**
- Waguespack, Dustin, ( ) Advisor: **K. Krishnamoorthy**

2019
- Chhetri, Pradeep, (Teaching Faculty, Rose State College) Advisor: **A.S. Vatsala**
- Hasan, Md Sazib, (Assistant Professor, Dixie State University) Advisor: **K. Krishnamoorthy**
- Lv, Shanshan, (Assistant Professor, Truman State University) Advisor: **K. Krishnamoorthy**
- Moodie, Mark, Advisor: **L. Robert Gonzalez**
- Subedi, Subhash, Advisor: **A.S. Vatsala**

2018
- Donald Davis, (Instructor, University of Louisiana Monroe) Advisor: **Birkenmeier, G.**
- Blaise Heider, (Visiting Assistant Professor, Eckerd College) Advisor: **Birkenmeier, G.**
- Lihong Zhoa, (Postdoctoral Researcher, University of Idaho), Advisor: **Sutton, K.**

2017
- Tingting Tang, (Postdoc, Unversity of Notre Dame), Advisor: **Ackleh, A.S.**
- Vojislav Petrović, (Instructor, University of Louisiana at Lafayette), Advisor: **Davis, D.**
- Xiao Wang, (Assistant Professor, Mathematics and Statistics Department,

Qingdao University), Advisor: **Krishnamoorthy, K.**

<u>2016</u>
- *Xinyu Li, Advisor: **Ackleh, A.S.**
- Jared Guilbeau, Advisor: **Kearfott, R.B.**
- Tracy Robin, Advisor: **Ng, P.**
- Bhuvaneswari Sambaandham, Advisor: **Vatsala, A.S.**

<u>2015</u>
- *Vinodh Chellamuyhu, (Assistant Professor, Dixie State University, Utah), Advisor: **Ackleh, A.S.**
- Robert Miller, Advisor: **Ackleh, A.S.**
- Yixiang Wu, Advisor: **Deng, K**
- Suntaree Unhapipat, Dissertation Advisor: **Pal, N.**

Funding

External Funding

Ackleh, A.S.
- Co-Investigator, Old Dominion University Research Foundation, Spatial Eco-epidemiology of Tick-borne Rickettsial Pathogens, September 2017- August 2022, $256,173.
- Co-Principal Investigator, Gulf of Mexico Research Initiative Fund, Littoral Acoustic Demonstration Center: Gulf Ecological Monitoring and Modeling (LADC: GEMM). 2015-2017, $5,238,174. (additional continuation funding in the amount of $680,000 was approved for the year 2019).
- Principal Investigator, National Science Foundation, Nonautonomous Structured Population Models with Application to Amphibians and Associated Diseases. Grant number DMS-1312963. 2013-2016, $235,000.
- Principal Investigator, U.S. Department of the Interior, Computer Simulation Model Upgrade for Hurricane, Sea-Level, and Wetland Ecosystem Application. 2013-2016, $174,794.
- Principal Investigator, U.S. Department of the Interior, US Geological Survey, Graphic Visualization Tool and Animation Product of Mekong River Flow, Dam Effects and Impact on Food Security. 2011-2016, $194,145.

Beaulieu, P.
- Co-Principal Investigator, NSF, Strengthening Teacher Education through Mathematics & Science Teaching Scholars in Louisiana. September 2014-August 2019, $1,193,309.
- Co-Principal Investigator, National Science Foundation: Louisiana Mathematics Masters in the Middle (LaM^3). September 15, 2012-August 31, 2019, $1,858,145.

Borel, M.B.
- Principal Investigator, Math Science Partnership in conjunction with Iberia Parish School Board, LA Department of Education Amount funded for UL Lafayette personnel 2 yrs, $51,432.00.

Browne, C.
- Co-Principal Investigator for National Science Foundation, RAPID: Epidemiological and Phylogenetic Models for Contact- Based Control of COVID-19, June 15, 2020 – September 30, 2021, $199,009.
- Principal Investigator, National Science Foundation grant, Dynamics and Evolution of Virus and Immune Response Networks, June 15, 2018-May 31, 2021, $219,641.
- AMS Simons Travel Grant, $4,400 for conference, research collaboration travel expenses ($400 for Math department) 2015-2017.
- Principal Investigator, conducted research on virus-immune response models and Ebola models, Paper published in Journal of Mathematical Biology, June 1-July 31, 2016, $4,000.

Chiquet, R.
- Principal Investigator CURM (Center for Undergraduate Research in Mathematics), mini-grant awarded for 2019-2020, $22,100.
- Co-PI on a STEP Grant, Projectors for Enhanced Instruction in MDD 302 and 309 in the Department of Mathematics, 2019, $8,628.72.
- Co-Principal Investigator, STEP Proposal SP18-30, Upgrade the Computer Lab in MDD 212, June 13, 2018, $12,479.60.
- Co-PI on a STEP Grant, Laptop Computer for Mobile Classroom Projectors in the Department of Mathematics, 2016, $6150.
- Co-PI on a STEP Grant, Projectors for Enhanced Instruction in the Department of Mathematics. Fall 2015, $2400.

Davis, D.
- Co-Principal Investigator, National Science Foundation conference grant, Homotopy Theory: Tools and Applications, University of Illinois at Urbana-Champaign, IL, July 2017-June 2018, $45,000.

Fisher, D.
- Co-Principal Investigator, National Science Foundation, The HILT-LAS Project: High Impact, Little Time activities that address Lexical Ambiguity in Statistics, 2015-2017, $215,371.

Gulbudak, H.
- Co-Principal Investigator for National Science Foundation, RAPID: Epidemiological and Phylogenetic Models for Contact- Based Control of COVID-19, June 15, 2020 – September 30, 2021, $199,009.

- Principal Investigator, National Science Foundation, Modeling Across-Scale Feedbacks of Pthogen Virulence, Host Immunity and Disease Control, August 1, 2020 – July 31, 2023, $239,939.
- Principal Investigator for Board of Regents Support Fund, Modeling Across-scale feedbacks of Pathogen Virulence, host Immunity, and Disease Control, June 1, 2020-June 1, 2023, $133,254 (Annual).
- Co-Principal Investigator, Simons Foundation Collaboration Grants for Mathematicians, Multi-Scale Structured Models of Infectious Disease Dynamics, Sept. 2019 – Aug. 2024, $42,000.
- IPAM travel grant, June 2019, $600
- ASU travel grant, October, 2017, $150

Kearfott, B.
- Co-Principal Investigator, STEP Proposal SP18-30, Upgrade the Computer Lab in MDD 212, June 13, 2018, $12,479.60.

Koytcheff, R.
- Louisiana Board of Regents Research Support Fund (BORSF), Research Competitiveness Subprogram (RCS), Algebraic Structures and Geometric Phenomena in Spaces of Embeddings, 2019 – 2022, $137,644.

Li, L.
- Principal Investigator, Louisiana Board of Regents Support Fund (BORSF) Research Competitiveness Subprogram (RCS), High-Order Computational Methods for Beams and Plates with Applications to Fluid-Structure Interaction Problems, June 2018-May 2021, $178,131.

Lopez, K.
- Co-Principal Investigator, National Science Foundation, Strengthening Teacher Education through Mathematics & Science Teaching Scholars in Louisiana. September 2014-August 2019 $1,193,309.
- Co-Principal Investigator, National Science Foundation, Louisiana Mathematics Masters in the Middle (LaM^3). 2012-2017, $1,858,145.

Lynd, J.
- Principal Investigator, National Science Foundation, Structure and Cohomology in Fusion Systems, August 2019 – July 2022, $135,000.

Ng, P.
- Principle Investigator, National Science Foundation grant, 15th ECOAS (East Coast Operator Algebras Symposium) Conference, University of Louisiana at Lafayette, October 7-8, 2017, $28,000.
- Principle Investigator, National Science Foundation, Classification of C*-algebras, Flow equivalence of shift spaces, and graphs and Leavitt path algebras, March 1, 2015-February 29, 2016, $40,610.

Pal, N.
- Principal Investigator, Smooth Transition for Advancement to Graduate Education (STAGE) for Underrepresented Minorities in Mathematical Sciences: A Pilot project, National Science Foundation. January 2011-December 2013, $548,880.

Robert, L.
- Co-Principal Investigator, Simons Foundation Collaboration Grants for Mathematicians, Dixmier sets of C*-algebras, September 1, 2017-August 31, 2022, $42,000.
- Co-Principal Investigator, NSF, Conferences and Workshops in the Mathematical Sciences, Miniworkshop on the Cuntz semigroup, June 18-20, 2018, $8500.00.

Salceanu, P.
- Co-Principal Investigator, Simons Foundation Collaboration Grant for Mathematicians, Persistence in Concrete Biological Systems, September 1, 2017-August 31, 2022, $42,000.

Sang, Y.
- Co-Principal Investigator, Accounting for the Barometric Pressure Impacts on Psychrometric Performance Testing of Unitary Air-Conditioning and Heat Pump Equipment, 1824-TRP, 04/2020-10/2021, $132,174.

Vatsala, A.S.
- Principal Investigator, Louisiana Board of Regents Support Fund, 2016-2017, $16,750.
- Co-Principal Investigator, Global Initiative of Academic Networks (GIAN), IIT, INDORE, December 2017, $8,544.00.

Veprauskas, A.
- Principal Investigator, Louisiana Board of Regents Office of Sponsored Programs RCS Fund, Title: Understanding species persistence under reoccurring environmental disturbances, June 1, 2020 – June 30, 2023, $134,925.
- Co-Investigator, Old Dominion University Research Foundation, Spatial Eco-epidemiology of Tick-borne Rickettsial Pathogens, September 2017- August 2022, $256,173 (original amount), Dr. Veprauskas awarded remaining 3/5 of grant or $153,704.

Xue, F.
- Principal Investigator, Fast algorithms for large-scale nonlinear algebraic eigenproblems. NSF DMS-1419100, 2014-2017, $180,000.
- Principal Investigator, Fast algorithms for large-scale nonlinear algebraic eigenproblems. EPSCoR Pilot Fund, Louisiana Board of Regents, 2014-2015, $10,000.

Awards/Honors

- **Lynd, J.** Devon Endowed Professorship in Mathematics, 2020- present.
- **Chiquet R.**, Rollie Lamberson Research Award 2019.
- **Gulbudak, H.** IPAM Travel Grant, $600 (plus lodging expenses for 5 nights), June 2019.
- **Gulbudak, H.** CMES-2019 Conference Travel funding (registration, lodging and meals), April 2019.
- **Gulbudak, H.** Tulane University Applied & Computational Math Seminar Travel funding, February 2019.
- **Krishnamoorthy, K**., College Research Excellence Award 2018-2019.
- **Veprauskas, A.** Rollie Lamberson Research Award Medal, from the resource Modeling Association (RMA) 2019.
- **Wade, B.**, C.B.I.T. TC/LEQSF Regents Professor 2019.
- **Chiquet, R.** awarded the University's Outstanding Advisor Award in 2018.
- **Gulbudak, H.** MBI travel grants, $600.00 (plus lodging expenses for 3 nights), March & April 2018.
- **Kim, S.** Kutner Travel Grant, 2018.
- **Deng, K.**, Lafayette Coca-Cola/BORSF Professor in Mathematics, 2014-2017.
- **Birkenmeier, G.** Jack & Gladys Theall/BORSF Endowed Professor in College of Sciences, 2016-2019.
- **Browne, C.** American Mathematical Society/Simons Foundation Travel Grant, 2016
- **Wang, X-S**. Research Travel Grant, 2016.
- **Chiquet, R.** Dr. R.P. Authement Excellence in Teaching Award, 2015.
- **Magidin, A.** Provost's Travel Grant, University of Louisiana at Lafayette, May 2015.

Other Professional Activities

- **Ackleh, A.S.** Director of Computational and Visualization Enterprise (CAVE). University of Louisiana at Lafayette, 2010-Present.
- **Beaulieu, P.** peer reviewed book chapter 2Deepening the Mathematical Knowledge of Middle School Teachers: A Mathematician's Journey in Strengthening Mathematical Reasoning Among Middle School Students with Hidden or Unmet Potential: A Practitioner Text (P. Sheppard, M. Gallagher, eds), (pp. 11-15). Rowman & Littlefield, 2019.
- **Beaulieu, P.** Presented Workshop with Nathan Dolenc (Assistant Professor Department of Curriculum and Instruction, UL Lafayette College of Education) and STEMS[2] Circle Undergraduates (UL Lafayette): "Learning About Animal Traits Through Interactive Demonstrations and Gameplay" for teachers at the 2018 LATM/LSTA Joint Math and Science Conference: Full Steam Ahead! Shreveport, LA, October 22-24, 2018.
- **Beaulieu, P.** Presented poster with N. Dolenc using Undergraduate Noyce Scholars to Introduce Biological and Mathematical Principles to Third Graders", Noyce Summit, Washington, DC, July 19-20, 2017.

- **Berry, C.** Served as Chapter Representative for the Louisiana ASA (American Statistical Association)
- **Birkenmeier, G.** Careers in Mathematics and Mathematical Research, Louisiana Board of Regents Speaking of Science Program, Baton Rouge International School, Baton Rouge, LA, March 14, 2017.
- **Birkenmeier, G.** lecture for undergraduate mathematics majors and faculty, Loyola University, New Orleans, LA, March 16, 2017.
- **Birkenmeier, G.** Careers in Mathematics, Louisiana State Speaking of Science Program, Baton Rouge International School, March 11, 2016.
- **Birkenmeier, G.** State Speaker of Science (SOS) Program: Gave a presentation on Careers in Mathematics at the Kenilworth Science and Technology School. November 7, 2015, Baton Rouge, Louisiana.
- **Browne, C.**, Reviewer for total of 8 NSF career grant proposals
- **Browne, C.**, Invited NSF CAREER Panelist in Math Biology
- **Browne, C.**, Traveled to NSF in Alexandria, Virginia to serve as panelist for two full days deliverating rankings of 25 NSF career grant proposals in Math Biology. (Expenses covered by NSF).
- **Browne, C.** Reviewer for research grant proposal submitted to Austrian Science Fund (FWF) (analogous to NSF).
- **Browne, C.** Grant Proposal Reviewer: Peer reviewer Visited Arizona State University to collaborate with Dr. Hal Smith, February 23-March 1, 2017.
- **Browne, C.** Grant Proposal Reviewer: Peer reviewer for 2 proposals submitted to the Defense Threat Reduction Agency (DTRA) in response to the Basic and Applied Sciences Broad Agency Announcement (BAA) for a topic entitled " Modeling Infectious Disease Kinetics and the Host Immune Response"
- **Browne, C.** ULL Applied Math Seminar Organizer, Spring & Fall 2017.
- **Browne, C.** Mentored undergraduate mathematics student Claire Maxwell in undergraduate research project, Fall 2016.
- **Browne**, **C.** Applied Mathematics Seminar Organizer in Fall 2016.
- **Davis**, **D.** Attended Homotopy Theory: Tools and Applications at University of Illinois, Urbana-Champaign, July 2017.
- **Davis**, **D.** , Organizer of the Spring 2020 UL Math Department Topology Seminar.
- **Davis**, **D.** Participant in "Warm-up Conference for Transatlantic Transchromatic Homotopy Theory Conference II, University of Regensburg, August 3, 2020.
- **Davis**, **D.** Attended Homotopy Theory: Tools and Applications at University of Illinois, Urbana-Champaign, July 2017.
- **Davis**, **D.** Organizer of the Fall 2016 UL Math Department Topology Seminar.
- **Gulbudak, H.** for two Mini-symposium sessions: Modeling Population Dynamics in Ecology and Epidemiology I-II, **The 2nd Annual Meeting of SIAM Texas-Louisiana Section, Dallas, TX, November 1-3, 2019.**
- **Gulbudak, H.** Mini-symposium Organizer: Modeling Infection Dynamics Across the Scales, **The 5th International Conference on Computational & Mathematical Population Dynamics,** Florida Atlantic University, Fort Lauderdale, FL, May 19-24, 2019.
- **Gulbudak, H.** ULL Applied Mathematics Seminar organizer (Spring 2018-Present)

- **Gulbudak, H.** Faculty chair for Association for Women in Mathematics (AWM) ULL student chapter, Fall 2018-Present.
- **Gulbudak, H.** Referee for a mathematical modeling book for World Scientific Publishing Company.
- **Gulbudak, H.** Referee for a grant proposal for The Netherlands Organization for Scientific Research (NWO).
- **Hackney, P.,** Research Member in Higher Categories and Categorification, Mathematical Sciences Research Institute, Oakland, CA, January – May 2020.
- **Hackney, P.**, AMS MathSciNet Reviews: MR3921622, MR3923831, MR396882, MR3975894.
- **Kearfott, R.B.** Co-Chair Organizing Committee, 2019 IFSA (International Fuzzy Systems Association) World Congress and NAFIPS (North American Fuzzy Information Processing Society) Annual Conference, held in Lafayette, LA.
- **Kearfott, R.B.** Elected member, NAFIPS Board.
- **Kearfott, R.B.** Chair of the IEEE Computer Society Microprocessor Standardization Committee (IEEE-SA/MSC), 2018.
- **Kearfott, R.B.** Acting Chair of the IEEE (Institute of Electrical and Electronics Engineers) Standards Association P-1788 Working Group on Standardization of Interval Arithmetic.
- **Koytcheff, R.** ULL Topology Seminar Organizer, Spring 2018.
- **Koytcheff, R.** Co-Organizer of the Lloyd Roeling Conference in Topology, University of Louisiana at Lafayette, November 2017.
- **Lynd, J.** Participated as visiting member in Newton Institute Semester Program "Groups, representations and applications", Cambridge, UK, January-March 2020.
- **Lynd, J.** Reviewed three papers for MathSciNet. (1 in 2017, 2 in 2018)
- **Magidin, A.** Reviewed 7 papers for Mathematical Reviews.
- **Magidin, A.** Wrote 25 reviews for MathSciNet, 2014-Present.
- **Pal, N.** Statistics session chair, International Conference on Mathematics & Applications (ICMA-MU 2018) Mahidol University, Thailand, December 16-18, 2018.
- **Pal, N.** Statistics Seminar, University of Louisiana at Lafayette, Lafayette, LA, October 12, 2018.
- **Pal, N.** Co-Organizer UL Departmental Statistics Seminar Series, 2018.
- **Pal, N.** Undertook a research project on behalf of the Lafayette City Police Department: "Estimation of Crowd Size in Lafayette, Louisiana, at King's Parade During Mardi Gras 2017." The report of this project was presented at the Louisiana Chapter of the American Statistical Association Spring 2017 Meeting, April 7, 2017.
- **Pal, N.** Supervised the research of the following two postdoctoral scholars supported by the Royal Thai Government:
  - Dr. Suntaree Unhapipat (visitor from Mahidol University, Thailand, January 1, 2017-July 30, 2017). This research supervision has resulted in one research manuscript.
  - Dr. Phontita Thiuthad (visitor from Prince of Songkla University, Thailand, January 12, 2017-December 31, 2017). This research supervision has resulted in one research manuscript.

- **Pal, N.** Supervised one senior (undergraduate) student's research who visited UL Lafayette with a scholarship from the Royal Thai Government:
  - o Ms. Kanokwan Channgam worked on the special project ' A Statistical Analysis of Bangkok Traffic Accident Data'. This project report has been submitted as a research manuscript to a scientific journal. This work was presented as a departmental undergrad student seminar presentation in Fall 2017.
- **Pal, N.** Visited Research Center for Operator Algebras at the East China Normal University, Shanghai, China, collaborate with colleagues, July 9-23, 2016.
- **Pal, N.** Visited the University of Cincinnati, collaborated with Professor Kaftal and Professor Zhang, July 30-August 6, 2016.
- **Pal, N.** Visited Loyola University Chicago to attend the East Coast Operator Algebras Symposium, collaborated with Professor Paul Skoufranis, September 30-October 2, 2016.
- **Pal, N.** Served as a referee for seven International Statistics Journals, 2016.
- **Pal, N.** Invited to teach as an adjunct faculty at University of Science, Ho Chi Minh City, Vietnam; offered a short summer course 'Statistics in Engineering', June 2016.
- **Pal, N.** Visited the University of Wyoming, Laramie, WY, to attend the West Coast Operator Algebras Seminar, collaborated with Professor Zhuang Niu, October14-16, 2016.
- **Pal, N.** Visited the University of Cincinnati to collaborate with Professor Kaftal and Professor Zhang, July 30-August 6, 2016.
- **Pal, N.** Served as a referee for six international Statistics journals, 2015.
- **Pal, N.** Invited to conduct two workshops on Statistical Modeling & Applications in May 2015, Modules-1, 2, 3 at Ho Chi Minh City University of Technology, and Module-4 at Can Tho University, Vietnam.
- **Pal, N.** Invited to teach as an adjunct faculty at Ton Duc Thang University, Ho Chi Minh City, Vietnam; offered a short graduate level course 'Statistical Decision Theory & Bayesian Analysis', July 2015.
- **Pal, N.** Invited to deliver a research talk at Da Lat University, Da Lat, Vietnam, December 19, 2015.
- **Pal, N.** Invited to deliver a research talk at Second International Conference on Theory & Applications of Statistics, Dhaka University, Bangladesh, December 27-29, 2015.
- **Pal, N.** Invited Plenary Speaker at the 5th Vietnam National Congress in Probability and Statistics, Da Nang, Vietnam, May 23-25, 2015.
- **Robert, L.** Co-Organizer of the UL MATH Club, September 2018- May 2019.
- **Rogers, C.** AMS MathSciNet Reviews: MR3311762, MR3300319, September 2015.
- **Roy, J.** Served as a judge for the American Statistical Association's National Statistics Project Competition (an annual project competition for students in grades 7-12). July 2013 and June 2014, June-July 2015, June-July 2016, June-July 2017, June-July 2018.
- **Roy, J.** Question Writer and Grader for the Student Team Competition at the Annual Meeting of the LA/MS Section of the MAA, February-March 2018.
- **Roy, J.** Gave a presentation, "Fractals" (with Beth de Mahy), at the Iberia Parish Gifted by Nature Day, a program for gifted students in elementary and middle school, May 16, 2018.
- **Roy, J.** Question Writer for the Student Team Competition at the 2017 Louisiana/Mississippi Section Meeting of the MAA.

- **Roy, J.** Reviewer for QSM (Quality Science & Math) middle school math grant proposals for the Louisiana Association of Teachers of Mathematics (LATM), October 2015
- **Vatsala, A.S.** Invited to be member of the International Organizing Committee (IOC) in 2019, for the ICNPAA 2020 world congress- 13th Conference at Czech Technical University in Prague, Prague, Czech Republic.
- **Vatsala, A.S.** Research Proposal Review (Two of them) for (ETIS) Estonian Research Information System.
- **Vatsala, A.S.** Invited to be a member of the International Organizing Committee (IOC) for the ICNPAA 2018 World Congress: 12th International Conference on Mathematical Problems in Engineering, Aerospace, and Sciences.
- **Vatsala, A.S.** Research Competitiveness Program at the American Association for the Advancement of Science (AAAS), reviewed five research proposals.
- **Vepraskas, A.** Rollie Lamberson Research Award Medal, from the Resource Modeling Association (RMA).
- **Wang, X-S.** Reviewed papers for MathSciNet: MR3661840, MR3639116, MR3555141.

Offices Held and Professional Memberships

- **Ackleh, A.S**. American Mathematical Society (AMS).
- **Ackleh, A.S**. Society of Mathematical Biology (SMB).
- **Ackleh, A.S**. Society of Industrial and Applied Mathematics (SIAM).
- **Ackleh, A.S**. International Society of Difference Equations (ISDE).
- **Beaulieu, P.** Member National Council of Teachers of Mathematics
- **Beaulieu, P.** Member/Mentor National Alliance for Doctoral Studies in the Mathematical Sciences
  Beaulieu, P. Member Mathematical Association of America
- **Birkenmeier, G.** American Mathematical Society (AMS).
- **Boddie, K.**, American Mathematical Society (AMS) and Association for Women in Mathematics (AWM).
- **Deng, K**. American Mathematical Society.
- **Fatheree, D.** Mathematical Association of America.
- **Fatheree, D.** National Council of Teachers of Mathematics.
- **Fatheree, D.** Louisiana Association of Developmental Education.
- **Fatheree, D.** Louisiana Council of Teachers of Mathematics.
- **Fatheree, D.** Acadiana Council of Teachers of Mathematics.
- **Fatheree, D.** Louisiana Academic Advising Association.
- **Fisher, D.** American Statistical Association.
- **Fisher, D.** International Association of Statistics Educators.
- **Fisher, D.** Mathematical Association of America.
- **Gulbudak, H.** Member of the Mathematical Association of America (MAA).
- **Gulbudak, H.** American Mathematical Society (AMS).
- **Gulbudak, H.** Society for Industrial and Applied Mathematics (SIAM).
- **Gulbudak, H.** Society for Mathematical Biology (SMB).
- **Gulbudak, H.** Association for Women in Mathematics (AWM).

- **Hackney, P.**, Member of American Mathematical Society.
- **Jumonville, M.L.** Member of National Council of Teachers of Mathematics.
- **Jumonville, M.L.** Member of Louisiana Association of Teachers of Mathematics.
- **Jumonville, M.L.** Member of Acadiana Council of Teachers of Mathematics.
- **Kearfott, R.B.** Vice Chair (and current acting chair) IEEE P-1788 working group for standardization of interval arithmetic.
- **Kearfott, R.B.** Chair IEEE Computer Society Microprocessor Standardization Committee, IEEE-SA/MSC.
- **Kim, S.** Treasurer, Louisiana Chapter of the American Statistical Association, 2019.
- **Kim, S.** President, Louisiana Chapter of the American Statistical Association, 2018.
- **Kim, S.** Vice-President, Louisiana Chapter of the American Statistical Association, 2016-2017.
- **Koytcheff, R**. Member of the American Mathematical Society.
- **Krishnamoorthy, K.** Member of the Institute of Mathematical Statistics
- **Krishnamoorthy, K.** Louisiana Chapter of the American Statistical Association, Chapter Representative, 2013-Present.
- **Li, L.**, Member of Society for Industrial and Applied Mathematics (SIAM).
- **Lopez, K**. Member of the UL Lafayette PARCC Campus Leadership Team (Partnership for Assessment of the Readiness for Colleges and Careers) - a consortium of 25 states working to development an assessment of the Common Core State Standards for Grades K-12. July 2011-Present.
- **Lopez, K**. UL Lafayette Committee on General Education, member, 2007-Present.
- **Lopez, K**. Member of MAA National Committee on Two-Year Colleges, 2012-Present.
- **Lopez, K**. Member: MAA, LA/MS Section of MAA, NCTM, LATM, LaMsMATYC.
- **Lynd, J.** Member of American Mathematical Society
- **Magidin, A.** Member of American Mathematical Society, Mathematical Association of America.
- **Rogers, C**. Member American Mathematical Society.
- **Roy, J.** Member of the Student Competition Committee for the Louisiana/Mississippi Section of the MAA.
- **Roy, J.** Member of the Mathematical Association of America (MAA).
- **Roy, J.** American Mathematical Society (AMA).
- **Roy, J.** American Statistical Association (ASA).
- **Salceanu, P.** Chair for the 2016 Lloyd Roeling ULL Math Conference for Applied Math.
- **Sang, Y.** Member of the International Chinese Statistical Association (ICSA).
- **Sang, Y.** American Statistical Association (ASA). Institute of Mathematical Statistics (IMS).
- **Sang, Y.** American Mathematical Society (AMS).
- **Sutton, K.L.** Appointed to SIAM Diversity Advisory Committee for January 2017-December 2019.
- **Sutton, K.L.** Member of the Society of Mathematical Biology (SMB).
- **Sutton, K.L.** Society for Industrial and Applied Mathematics (SIAM).

- **Vatsala, A.S.** Member/Mentor National Alliance for Doctoral Studies in the Mathematical Sciences.
- **Vatsala, A.S.** Member of the American Mathematical Society.
- **Vatsala, A.S.** World Congress of Nonlinear Analysts.
- **Vatsala, A.S.** Member of Mathematical Association of America.
- **Vatsala, A.S.** Member of the International Federation of Nonlinear Analysts.
- **Vatsala, A.S.** ETIS, Estonian Research Information System
- **Wade, B.** Member of the American Mathematical Society
- **Wade, B.** Society for Industrial and Applied Mathematics (SIAM)
- **Wade, B.** Department of Mathematics Liaison for the Association for Women in Mathematics (AWM)
- **Wang, X.-S.** Member of the American Mathematical Society.