

Tenth Graduate Student Mini-conference in Computational Mathematics

December 10, ACLC 102, Auburn University

8:50AM – 9:00AM	Opening Remarks
9:00AM – 9:20AM	Lanjing Bao (Georgia State University) <i>Reduction to smooth maps for the global dynamics of a vibro-impact energy harvester</i>
9:20AM – 9:40AM	John Carter (Missouri University of Science and Technology) <i>SAV Ensemble Algorithms for the magnetohydrodynamics equations</i>
9:40AM – 10:00AM	Amy de Castro (Clemson University) <i>A partitioned method for the solution of fluid-structure interaction and ROM implementation</i>
10:00AM – 10:20AM	Cao Kha Doan (Auburn University) <i>Low regularity integrators for semilinear parabolic equations with maximum bound principles</i>
10:20AM – 10:50AM	Coffee Break
10:50AM – 11:10AM	Haniyeh Fattahpour (Georgia State University) <i>Effects of scaffold elasticity and nutrient depletion on cell proliferation in a tissue engineering scaffold pore</i>
11:10AM – 11:30AM	Yuwei Geng (University of South Carolina) <i>Convolutional Neural Network for Phase Field Modeling</i>
11:30AM – 11:50AM	Elizabeth Hawkins (Clemson University) <i>Numerical analysis of continuous data assimilation for semilinear heat equation</i>
11:50AM – 12:10PM	Toan Huynh (Auburn University) <i>Space-time domain decomposition methods for flow and transport problems in fractured porous media</i>
12:10PM – 2:00PM	Lunch Break
2:00PM – 2:20PM	Ying Li (University of Florida) <i>An artificial compressibility CNLF method for the Stokes-Darcy model and application in ensemble simulations</i>
2:20PM – 2:40PM	Emeka Mazi (Georgia State University) <i>Mathematical modeling of erosion and deposition in porous media</i>
2:40PM – 3:00PM	Steven Redolfi (University of Alabama at Birmingham) <i>Fourier Transforms for Generalized Sturm-Liouville Differential Equations</i>
3:00PM – 3:20PM	Yuankai Teng (University of South Carolina) <i>Learning Green's Functions of Linear Reaction-Diffusion Equations with Application to Fast Numerical Solver</i>
3:20PM – 3:40PM	Coffee Break
3:40PM – 4:00PM	Zezhong Zhang (Florida State University) <i>Spectral ReLu: A Smooth Generalization of ReLu in Functional Space</i>
4:00PM – 4:20PM	Bittini Hall (Auburn University)
4:20PM – 4:40PM	Pengjun Wang (Auburn University)
4:40PM – 5:00PM	Ridvan Ozdemir (Auburn University)