8th Annual JohnFest / SIAM Student Conference Agenda

Friday (Daniel 315)

5:00-6:00pm	Suncica Canic (Univ. of Houston) *Interactions between fluids and structures motivated by real-life problems: micro-swimmers, vascular stents, and heart valves*
6:30pm —	Dinner at Blue Heron Steak & Sushi

Saturday (Daniel 315)

8:30-8:45	Muhammad Mohebujjaman (Clemson University) *Decoupled, unconditionally stable, higher order discretizations for MHD flow simulation*
8:45-9:00	Jim Munch (Emory University) *An accurate effective method for solving flow rate boundary problems in incompressible unsteady fluid dynamics*
9:00-9:15	Mengying Xiao (Clemson University) *Some improvements to Yosida methods for Navier-Stokes simulations*
9:15-9:30	Sofia Guzzetti (Emory University) *Hierarchical Model Reduction for Incompressible Flows in Cylindrical Domains*
9:30-9:45	Michael McLaughlin (Univ. of Pittsburgh) *A Pressure Correction Method Via Crank-Nicolson Leapfrog Stabilization*
9:45-10:00	Joseph Fiordilino (Univ. of Pittsburgh) *A New Method for the Numerical Solution of Ensembles for Natural Convection Problems*
10:00-10:15	COFFEE BREAK
10:15-10:30	Yifan Wang (Univ. of Houston) *An Arbitrary Lagrangian Eulerian Discontinuous Galerkin Approach to Fluid-Structure Interaction Problems*
10:30-10:45	Shuhan Xu (Clemson University) *Numerical experiments on a viscoelastic Fluid-Structure interaction system*
10:45-11:00	Alan Lattimer (Virginia Tech) *Input Independent Techniques for Nonlinear Model Reduction*
11:00-:11:15	Xuping Xie (Virginia Tech) *Large Eddy Simulation Reduced Order Models (LES-ROMs)*
11:15-11:30	Huijuan Xu (Georgia Tech) *Large Eddy Simulation of Hemodynamics of Patients with Acute Type B Aortic Dissection*

11:30 - 1:00pm   Lunch break (on your own)

1:00-1:15	Lukas Bystricky (Florida State) *Calculating high altitude atmospheric density*
1:15-1:30	Nick Lopez (Florida State) *Identifying the tracer correlation problem in a spectral element dynamical core*
1:30-1:45	Isaac Lyngaas (Florida State) *A Radial Basis Function Quadrature Approach for Nonlocal Mechanics*
1:45-2:00	Chad Sockwell (Florida State) Simulation of Vortex Pinning in Two-Band Superconductors
2:00-2:15	Siwei Duo (Missouri Science & Technology) Error analysis on a weighted Trapezoidal approximation for the fractional Laplacian
2:15-2:30	Javier Ruiz Ramirez (Clemson University) *Time-dependent Stokes-Darcy flow with deposition*
2:30-2:45	COEFFEE BREAK
2:45-3:00	Dawit Denu (Auburn University) *Analysis of Stochastic Vector-Host Epidemic Model with Direct Transmission*
3:00-3:15	Peter Janstch (Oak Ridge National Lab) *Lebesgue Constants for Interpolation on Leja Points in Unbounded Domains*
3:15-3:30	Shuai Yuan (Univ. of South Carolina) *Parallel Compact Exponential Time Differencing Method for Parabolic Equations*
3:30-3:45	Boyi Yang (Emory University) *Patient-Specific CFD Analysis of Hemodynamics in Coronaries Treated with Bioresorbable Stents*
3:45-4:00	Victor Decaria (Univ. of Pittsburgh) *TBA*