SCALA 2023: SCIENTIFIC COMPUTING AROUND LOUISIANA

FRIDAY, MARCH 10: F. EDWARD HEBERT HALL (Building 7)
Room 201

Friday, March 10

1:00 – 1:15	*Welcome*
1:15 – 1:30	*Tomasso Buvoli (Mathematics, Tulane University)* **A New Class of Fully-Implicit-Explicit Time Integrators**
1:30 – 1:45	*Andrew Hicks (Mathematics, Louisiana State University)* **Modeling and Numerical Analysis of Cholesteric Shells**
1:45 - 2:00	*Hongfei Chen (Mathematics, Tulane University)* ***A coarse model for a choanoflagellate colony***
2:00 – 2:15	*Xiang Ji (Mathematics, Tulane University)* **Scalable phylogenetic inference**
2:15 – 3:00	*Coffee Break*
3:00 – 3:45	***Keynote talk:*** *Lisa Fauci (Mathematics, Tulane University)* **Insights from biofluidmechanics: a tale of tails**
3:45 – 4:00	*Kendall Gibson (Mathematics, Tulane University)* **Synchronization in Choanoflagellates**
4:00 – 4:15	*Jinpu Zhou (Mathematics, Louisiana State University)* **Bayesian nonparametric learning of stochastic differential equations**
4:15 – 4:45	*Coffee Break*
4:45 – 5:00	*Miao Zhang (Louisiana State University)* **An Inexact ADMM for Separable Nonconvex and Nonsmooth Optimization**
5:00 – 5:15	*Frederic Marazzato (Mathematics, Louisiana State University)* **Mixed formulation for the computation of Miura surfaces**
5:15 – 5:30	*Yuwei Bao (Mathematics, Tulane University)* **Smooth Skygrid: Bayesian coalescent-based inference of population dynamics**

Saturday, March 11

Time	
9:15 – 9:30	*Ying Bi (Mathematics, Tulane University)* **Numerical Simulation of Boussinesq Burgers Equations**
9:30 – 9:45	*Xiaoliang Wan (Mathematics, Louisiana State University)* **A deep adaptive sampling method for solving high-dimensional partial differential equations**
9:45 – 10:00	*Casey Cavanaugh (Center for Computation and Technology, Louisiana State University)* **Hodge decomposition method for the 3D quad-curl problem**
10:00 –10:15	*Dana Ferranti (Mathematics,Tulane University)* **Regularized Stokeslet Surfaces**
10:15 - 10:45	*Coffee Break*
10:45 –11:30	*Keynote talk:* *Fengyan Li (Mathematics, Rensselaer Polytechnic Institute)* **Energy Stable Numerical Methods for Maxwell's Equations in Nonlinear Optical Media**
11:30 –11:45	*Daniela Florez (Mathematics, Tulane University)* **Modeling Sustained Transmission of Wolbachia among Anopheles Mosquitoes: Implications for Malaria Control in Haiti**
11:45 – 1:00	*Lunch*
1:00 – 1:15	*Adnan Morshed (Mathematics, Tulane University)* **Vortical Structures using Fundamental Solutions of the Stokes Equations**
1:15 – 1:30	*Wen-Huai Tsao (Civil and Environmental Engr, LSU)* **Proteus: High-order methods for wave-structure interactions in coastal and offshore environments**
1:30 – 1:45	*Zhiyu Tan (Center for Computation and Technology, Louisiana State University)* **A finite element method for a two-dimensional Pucci equation**
1:45 – 2:00	*SeongHee Jeong (Mathematics, Louisiana State University)* **C0 interior penalty methods for an elliptic distributed optimal control problem with general tracking and pointwise state constraints**
2:00 – 2:15	**Closing remarks**