

TWIMS 2018

17-18 November 2018

Saturday, 17 November 2018	
12:30 PM - 1:30 PM	Registration (SEC 100 lobby)
1:30 PM - 1:45 PM	Introductory Remarks (SEC 100) Dr Jiwen He (Department Chair, UH, Department of Mathematics.)
1:45 PM - 3:00 PM	Keynote Lecture (SEC 100) - Dr. Sunčica Čanić, University of California, Berkeley Mathematical Problems in Fluids
3:00 PM - 3:15 PM	Group photo (In front of SEC 100)
3:15 PM - 5:00 PM	Presentation Session (20-min talks + 5 min Q-A)
Session A (SEC 202)	
3:15-3:40	Jen Berg- Rational solutions to polynomial equations and geometry
3:40-4:05	Aleksandra Sobieska- Minimal Free Resolutions over Rational Normal Scrolls
4:05-4:30	Hayley Boynton- On the Classification of Graphs Based on Their Rank Numbers
4:30-4:55	Rebecca Woods- Preliminary Results of Topological Symmetries of a 3-rung Möbius Ladder Embedded on a Torus
Session B (SEC 203)	
3:15-3:40	Christy Sue Langley- Games in Education
3:40-4:05	Mary Flagg- Zero Forcing: From Linear Algebra to the Power Grid
4:05-4:30	Sara Shirinkam- n-generalized Quasi-Baer annihilator conditions
4:30-4:55	Rita Stanaityte- ILU preconditioners for non-symmetric saddle point matrices with application to incompressible Navier-Stokes equation
6:00 PM - 8:00 PM	Dinner and Socialize

Sunday, 18 November 2018	
7:30 AM - 8:30 AM	Breakfast
8:30 AM - 10:10 AM	Presentation Session (20-min talks + 5 min Q-A)
Session A (SEC 202)	
8:30-8:55	Joanna Furno- Dynamics of Rational Maps and Exponentials in the Limit
8:55-9:20	Meagan Carney- Modeling Extremes in Dynamics under Stationary and Nonstationary Assumptions
9:20-9:45	Priyanga Ganesan- A factorization problem in l^p spaces
9:45-10:10	Anna Vershynina- How fast can entanglement be generated in quantum systems?
Session B (SEC 203)	
8:30-8:55	Annalisa Quaini- A computational study of lateral phase separation in biological membranes
8:55-9:20	Anyu Zhang- Partitioning Data Using Monomial Bases to Improve Network Inference in Systems Biology
9:20-9:45	Simona Hodis- Topological description of hemodynamics inside brain aneurysms
9:45-10:10	Bheemaiah Veena Shankara Narayana Rao- Efficacy of Fishing zones in Marine Protected Areas
Session C (SEC 204)	
8:30-8:55	Sarah Boon- Analysis of the Trojan Y Chromosome Eradication Strategy
8:55-9:20	Janet Sossamon- Surgical Performance Monitoring Using an Optimal Statistic
9:20-9:45	Natasha Astudillo- Comparative introduction to mathematical theory of the Fluorescence Correlation Spectroscopy for a diffusion process: Classical approach vs simplified approach
9:45-10:10	Lale Asik- Dynamics of a Stoichiometric Producer-Grazer System with Seasonal Effects on Light Level
10:15 AM - 11:30 AM	Poster Session (SEC 100 lobby)
11:30 AM - 1:00 PM	Lunch and Break-out Session
1:00 PM - 2:00 PM	<p>Panel discussion on Alternative Career Paths in Mathematics. Panelists: Dr. Mary Flagg (University of St. Thomas) Dr. Paulette Willis (Reasoning Minds) Dr. Dipanwita Saha (Cubic Corporation)</p> <hr/> <p>Salary Negotiation Workshop (SEC 202): Led by Ms. Caitlin Deis (Career Counselor, UH Career Services)</p>
2:00 PM - 2:30 PM	Concluding Remarks