

MAPS-REU 2016
ALL PRESENTATIONS IN KEB 1110 (KIM ENGINEERING BUILDING), UNIVERSITY OF MARYLAND, COLLEGE PARK, MD 20742-4015

# **FINAL PRESENTATION SCHEDULE**

### WEDNESDAY, AUGUST 3:

Registration/Morning Beverage		8:45 - 8:55am
Opening Remarks		8:55 - 9:00am
Lauren Casper (Utah State University)	Quasi Steady State Assumption as Applied to Mathematical Models of Schisoto-Immune Dynamics	9:00 - 9:15am
Adam Busis (Harvey Mudd College)	Bounding the Maximum Dimension of the Hilbert Scheme of n Points	9:25 - 9:40am
Gareth Johnson (North Carolina State University)	Numerical PDEs: Mixing and Enhanced Dissipation of Random Vector-Fields and Charged Particles in an Electromagnetic Field	9:50 - 10:05am
Luc Olivier (University of South Florida)	Stability Analysis of Nonlinear Models of the Immune Response to Schistosomiasis	10:15 - 10:30am
Gabriella Studt (MIT)	Constructing Networks to Model the Aggregation and Deformation of the Short- range Cluster	10:40 - 10:55am
Alexander Strzalkowski (Yale)	Data Integration through Second Order Subgraph Matching	11:05 - 11:20am
Phuong (Sophie) Le (Mount Holyoke College)	The Search for Maximal Dimension of the Tangent Space to Hilb^nC^3	11:30 - 11:45am
Alexandra Lara (Emory)	Parameter Sensitivity of within Host Models of Schistosomiasis	11:55am-12:10pm
LUNCH PROVIDED	MATH ROTUNDA	12:15-1:55pm
William Golding (University of Maryland)	Numerical PDE's: En- hanced Mixing by Shear Flows	2:00 - 2:15pm
Nate Gillman (Richard Montgomery High School)	Cores, Partitions, and Partitions	2:25 - 2:40pm
Alborz Zibaii (Montgomery College)	Simplifying the Partial Isometry Problem using Vector Quantization	2:50 - 3:05pm
Shelby Cox (UMass)	Hilbert and the Particles	3:15 - 3:30pm

#### THURSDAY, AUGUST 4:

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Coffee/Juice		8:30 - 8:50am	
Anna Brosowsky (Cornell)	Counting the Points of the Hilbert Scheme of n Points	9:00 - 9:15am	
Jenalee Reardon (Eastern Illinois University)	Numerical PDEs: Mixing and Dissipation in Fluid Mechanics and Phase Locking in Oscillators	9:25 - 9:40am	
Briton Park (Yale)	Clustering for Substructure Matching	9:50 - 10:05am	
Yakir Forman (Yeshiva University)	Building and Analyzing Lennard-Jones Aggrega- tion Networks	10:15 - 10:30am	
Christopher Dock (University of California, Berkeley)	Investigations into the Evolution of Gene Regulatory Networks via Rewiring	10:40 - 10:55am	
Charles Parker, UMD/ NSF supported. (UMD)	Mixing and Stability in the Incompressible Navi- er-Stokes Equations	11:05 - 11:20am	
Sebastian Sousa Cas- tellanos (East Carolina University)	Finding Saddles in Len- nard-Jones Clusters	11:30 - 11:45am	
Murray Pendergrass (Western Washington U)	Trying to Get Betti's Number	11:55am- 12:10pm	
LUNCH PROVIDED	MATH ROTUNDA	12:15 - 1:55pm	
Taylor Rhoads (Wake Forest University)	Partial Isometries: Frequent Substructures as Feature	2:00 - 2:15pm	
Chloe Ondracek (Minot State University)	Numerical PDEs: Enhanced Dissipation in a 3D Shear Flow	2:25 - 2:40pm	
Amal Mattoo (Sidwell Friends School)	Counting Colored Boxes	2:50 - 3:05pm	

## FRIDAY, AUGUST 5:

Farewell Luncheon will be held in the Math Rotunda - 12:00 - 2:00 PM

Students are welcome to leave afterwards.



