

# Applied Mathematics USRA Conference

## Friday, August 14, 2015

### MC 5479

#### Agenda:

8:45--9:00	Coffee/tea & cookies	
9:00 – 9:15	Aaruran Elamurugalyan	Computational techniques in the Finite Element method
9:15 – 9:30	Dinesh Siewnarine	Helmholtz Decomposition of Energy Spectra using Atmospheric Modeling Data
9:30 – 9:45	Matthew Robert Smart	Spatial Dynamics of Bacterial Interaction
9:45 – 10:00	Laura Chandler	Modelling Tides in the Shallow Water model
10:00 – 10:15	Jonathan Tot	Geometry of curved tetrahedra for Loop Quantum Gravity
10:15 – 10:30	Gabin Hubert Urbancic	Reflection of Internal Waves off Critical Slopes
10:30 – 10:45	Coffee/tea & cookies	
10:45 – 11:00	St. Laurent Dakota Hall	Computational Finance With GPUs
11:00 – 11:15	James Richard Hawley	Quasigeostrophic fluids and resonant interactions
11:15 – 11:30	Peivand Sadat Mousavi	Bacterial Plasmid Displacement
11:30 – 11:45	Shouzen Gu	Predictability of Turbulence
11:45 – 12:00	Jaron Meser Huq	Bacterial Growth Inhibition - Modeling and Experiments
12:00 – 12:15	Christian Barna	Experimentally Probing The Physiology of Bacteria
12:15 – 12:30	Cameron Meaney	Modelling Bacterial Susceptibility to DNA-Replication-Inhibiting Antibiotics
12:30	Pizza lunch*	

\*Please RSVP to [amug@uwaterloo.ca](mailto:amug@uwaterloo.ca) by August 12<sup>th</sup>, if you plan on staying for the lunch.