

08:45	Breakfast					
09:30	A word by the Student Committee					
09:35	A word by the IAM director			Title	Department	Moderator
09:40	Session 1	Bharath Antarvedi Goda	Mechanics of cutting and fracture of soft solids	Mechanical Engineering	Clément	Nancy
09:50		Mohammad Reza Rokhforouz	Diffusion of Lipid Nanoparticles Through Airway Mucus	Chemical and Biological Engineering		
10:00		Zelai Xu	Poroelastic modeling reveals two mechanisms for proteinuria	Chemical and Biological engineering		
10:10		Matteo Ferraresso	Energetics of Cytoskeletal Gel Contraction	Mechanical Engineering		
10:20		Damien Huet	High-performance adaptive simulations of immersed deformable membranes	Mathematics		
10:30		Xuemeng Wang	Damping of surface waves by a floating viscoplastic plate	Mathematics		
10:40		Gautam Luhana	An Implicit-in-time Immersed Boundary Method	Computer Science		
10:50		Break				
11:15	Session 2	Jonah Hall	Tdap Vaccination Modeling	Mathematics	Nancy	Sherril
11:25		Rituparna Banerjee	An Ecological Model of Original Antigenic Sin	Bioinformatics Program		
11:35		Alireza G. Tafreshi	First time infection? Dynamics of RSV	Zoology		
11:45		Clement Soubrier	Impact of ribosome population control on the dynamics of protein expression	Mathematics		
11:55		Fanze Kong	Qualitative Analysis of Chemotaxis Models	Mathematics		
12:05		Jack Hughes	Numerical PDE Bifurcation Analysis of Actin Wave Reaction Diffusion Models	Mathematics		
12:15		Merlin Pelz	The Emergence of Spatial Patterns with Diffusion-Coupled Compartments with Activator	Mathematics		
12:25		Group Picture + Lunch				
14:15	Session 3	Victor Sanches Portella	Unbiased Differential Privacy via Bounded Noise	Computer Science	Matthieu	Clément
14:25		Kaixun Hua	Next Generation Training Algorithms with Deterministic Global Optimality	Chemical and Biological Engineering		
14:35		Brian Irwin	Data Assimilation Meets Optimization	Earth, Ocean and Atmospheric Sciences		
14:45		Marco Caoduro	Geometric Challenges in Combinatorial Optimization	UBC Sauder School of Business		
14:55		Tina Behnia	Structures in Deep Neural Networks Under Imbalances	Computer ECE		
15:05		Geoffrey Woollard	Biomolecular Imaging via Cryogenic Electron Microscopy: Simulation and Inference	Mathematics		
15:15		Shikun Nie	Integrin tracking by MB imager	Mathematics		
15:25		Break + Award Annoucement				
15:50	Session 4	Liam Yih	Investigating the Interplay Between Two Modes of Motion of Influenza A	Mathematics	Clément	Matthieu
16:00		Fatemeh Saghaififar	Modelling the kinetics of NK cell cytotoxicity in the serial killing of cancer cells	Mathematics		
16:10		Elias Ventre	Trajectory inference for single-cell data with proliferation	Mathematics		
16:20		Joshua Scurll	Investigating lineage plasticity and treatment resistance in prostate cancer	Department of Urologic Sciences – VPC		
16:30		Joseph Janssen	Ultra-marginal Feature Importance: The Burnt Ends	Mathematics		
16:40		Mathew Scott	Signal Recovery with Generative Prior from Subsampled Fourier Measurements	Mathematics		
16:50		Sharvaj Kubal	Low Rank Matrix Recovery from Multinomial Samples	Mathematics		
17:00		Emma Hansen	The Quantum Entropy Equation	Mathematics		
17:10	End of the IAM retreat					