AMCS-MATH Day, Saturday August 26, 2023, room 110 MLH

- 8:15am (3 MLH, Muhly lounge) Breakfast pastries and drinks

- 9:00am Welcoming remarks

- 9:15am Natalie Randall : *Building a Stochastic Program for a Power System*

- 9:15am (118 MLH) Jinyang Wu (DiffG) : *A new renormalized volume type invariant*

- 9:35am Jessa Rhea : *A Covering Model for Multi-Period Mobile Facility Location and Routing with Stochastic Demand*

- 9:35am (118 MLH) Jacob Van Grinsven (Alg) : *Hopf Actions on Algebras*

- 9:55am Joey Small : *Initial Value Problems, Starting Approximations, and Traveling Backwards in Time*

- 9:55am (118 MLH) Joe Starr (Top) : *The Tanglenomicon: Tabulation of two string tangles*

- 10:15am Umesh Arampath : *Deep Learning applications in Molecular Property Prediction Tasks*

- 10:35am Adriana Fernandez (An) : *An exposition on von Neumann algebras*

- 10:55am Quentin Chediak : *Starting Approximations for Implicit Runge-Kutta methods*

- 11:15am Rebecca Sorsen (Top) : *Birman-Ko-Lee Left Canonical Form and its Applications*

- 11:35am Ibrahim Emirahmetoglu : *Using Second-Order Information in Training Autoencoders*

- 11:55am (3 MLH, Muhly lounge) Lunch break Italian style

- 1:30pm Jose Beltran Lizarazo (PDE) : *An introduction to the compensated compactness method and applications to hyperbolic conservation laws*

- 1:50pm Jingchao Gao : *Outlier Detection for Generative Models with Performance Guarantees*

- 2:10pm Fatou Ndow (MBio) : *Global Synchronization of Nonlinear and Non-Diffusively Coupled Oscillators*

- 2:30pm Breanna Guppy : *Determining Metabolic Fluxes from Metabolomics and Stable Isotope Tracing Data*

- 2:50pm Margarita Bustos Gonzalez (Alg) : *The Space of Holomorphic Differentials*

- 3:10pm Yao Yao : *Primal-Dual Hybrid Gradient Methods for Smooth Semi-Infinite Programming with Applications in Fairness-aware Machine Learning*

- 3:30pm Michael Davis (An) : *Rigidity for von Neumann Algebras of Graph Product Groups*

- 3:50pm Ying Liu : *Semi-Implicit Neural ODE for Graph Neural Diffusion*

- 4:10pm Anh Phan (MBio) : *Robustness of Mixed Mode Oscillations in three-timescale coupled Morris-Lecar neurons*

- 4:35pm Concluding remarks