



SPRING 2019

RENSSELAER POLYTECHNIC INSTITUTE

DEPARTMENT OF MATHEMATICAL SCIENCES COLLOQUIUM/RTG SEMINAR

"Modeling Particle Tracking Experiments that Reveal Intracellular Transport Mechanism"

Abstract: Many of the mechanisms that underlie intracellular transport by molecular motors are well-studied by both experiments and mathematical modeling. This is especially true of cargos that are being transported by individual motors and that are perturbed by certain kinds of external forces. However, our understanding of single-motor dynamics does not yet yield robust predictions for what has been observed at a whole cell scale when multiple opposite-directed motors interact with each other. In this talk, we will explore recent mathematical modeling and Bayesian inferential efforts that are directed at new experiments that are aimed at revealing multi-motor interactions in vitro.

Scott McKinley (Tulane University)

Monday, April 1, 2019

4-5pm

Amos Eaton 214

Peter Kramer

Refreshments served 3:30-4pm Amos Eaton 4th Floor Lounge