

Graduate Student Colloquium

An Introduction to Modeling Collective Behavior

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Abstract: We will discuss various models for describing the phenomena known as collective behavior. We start with a brief history of the area and how certain models were created. One can separate the models into two different camps. Those that emphasize long-range interactions, and those that emphasize short-range interactions. We will discuss the benefits and drawbacks of both of these types of models. With the second half of the talk we derive a Topological Model for describing collective motion, and discuss results associated with this model.

Wednesday, April 17 at 5:00 PM in 636 SEO