

The SUMO Speaker Series for Undergraduates

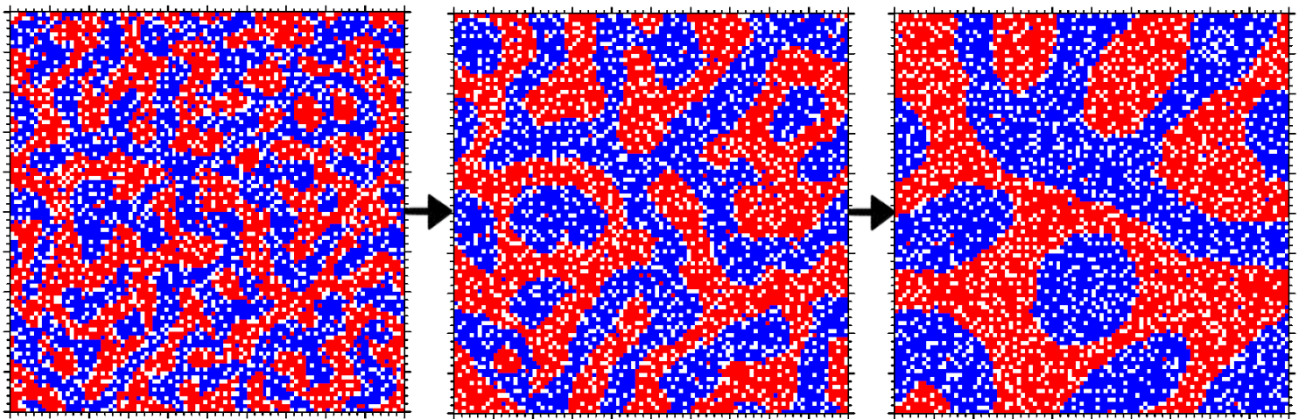
Thursday, February 20th

4:15-5:05, room 380C

(Food Provided)

Using mathematics to explore the phenomenon of social segregation

Nancy Rodriguez



Abstract:

In this talk I will discuss a model for social segregation. From an interacting-particle model I will formally derive a family of continuum models which differ due to the scaling assumptions made on the interacting potentials. We will see that this allows us to develop a versatile model, which is based on intuitive rules of interaction, while at the same time giving us the ability to perform rigorous mathematical analysis. Through rigorous analysis of the continuum model we explore the effect that social preference, economic disparity, and a heterogeneous environment have on social segregation.

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