MATHEMATICS SEMINAR

LYME DISEASE, RASH AND MATHEMATICS

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In this talk, I will introduce the basic principles behind mathematical immunology. Then we will discuss a few temporal and spatiotemporal models that describe how our immune system responds to various pathogens.

We also establish a PDE chemotaxis model for the innate response to Borrelia burgdorferi, the causative agent of Lyme disease. We illustrate the key factors which lead to the characteristic skin rash that is often associated with Lyme disease.

We finish the talk with a few comments regarding modeling in immunology.

Thursday, September 29th, 2016
3:30 pm – 4:30 pm
Seidler Room 220

LIGHT REFRESHMENTS WILL BE PROVIDED