

Cellular Automata with an Application to Biology



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Dr. Hawkins will define some dynamical systems called cellular automata, which are studied because their simple form yields surprisingly complex behavior. We will discuss their basic properties as symbolic dynamical systems and show how they can be applied to many settings. Dr. Hawkins will focus on a particular application to the spread of the HIV virus in the lymph node, explaining some of the math behind a model of the virus published by biologists.

March 19, 2007; 5:00 pm
Kerchof Hall 317

Organizer: Irina Mitrea, Department of Mathematics