



The National Institute for Mathematical and Biological Synthesis

cordially invites you to an

Interdisciplinary Seminar

Dr. Steven Wise

on

“Some mixture models for tissue growth with applications in spatiotemporal cancer modeling”

Tuesday, November 3, 2015

3:30-5 p.m.

Reception & refreshments at 3 p.m.

Hallam Auditorium, Room 206
1122 Volunteer Boulevard



Steven Wise is an associate professor of mathematics at the University of Tennessee, Knoxville whose research in computational mathematics focuses on development of efficient, adaptive multi-grid methods to address interface problems in fluid, material, and biological sciences, as well as level-set and phase-field interface capture method development. His research in mathematical biology involves simulating tumor growth, while his work in computational materials science involves simulating crystal growth.

Abstract: In this talk, Dr. Wise will describe some PDE and IPDE models of tissue dynamics, mainly with applications in tumor growth problems. We will examine the details of the model formulations, some issues of well-posedness, and aspects of efficient numerical approximation. Some of the work is a few years old, some is preliminary, but the discussion will at all times be informal.

