

CENTRAL MICHIGAN UNIVERSITY
Department of Mathematics
GRADUATE STUDENT
SEMINAR

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LESSONS FROM SMS: INFECTIOUS DISEASE
MODELING

Tuesday, November 8, 4:00 pm - 5:00 pm
Pearce Hall, Room 227

Séminaire de Mathématiques Supérieures is an annual graduate summer school funded by various mathematics research institutes across Canada and the United States. In 2016, SMS was held at the University of Alberta with the general theme “Dynamics of Biological Systems”. Over the course of two weeks, twelve individual sessions were run on topics ranging from pattern formation and network symmetry to models of membrane electrical behavior and interacting populations.

In this talk, we will discuss the session on the modeling of infectious disease presented by Dr. Zhilan Feng (Purdue University). In particular, we will explore the effect of heterogeneous mixing of a population under a vaccination program and the coupling of within-host and between-host systems. Along the way, we will also present the necessary background to understand and enjoy the material.