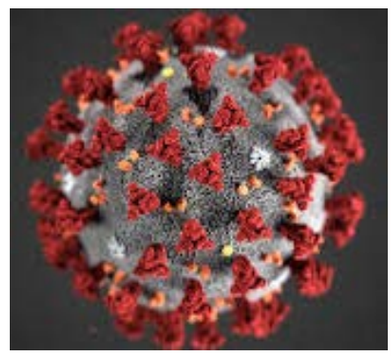
Centre for Disease Modelling
Canada-China Distinguished Lecture
Mathematics and COVID-19

Several spatial epidemic models in a heterogeneous environment with applications to COVID-19

With

Dr. Yuan Lou
Department of Mathematics
Ohio State University



Friday June 19, 2020
8:30 pm – 9:30 pm (Eastern Time)

Webinar: Connect at https://yorku.zoom.us/j/98615589444?pwd=S1JYcVA0R291blBoZzBnRkhDdW56dz09
Also see announcement at cdm.yorku.ca

Abstract: In the first part of the talk, I will discuss several SIS and SEIR reaction-diffusion models in spatially and/or temporally varying environments, with predictions on the basic reproduction number and the control of infected populations. The second part will be devoted to the discussions of a multi-stage and multi-scale SEIR meta-population model, with application to the COVID-19 pandemic outbreak.

Dr. Yuan Lou received his Ph.D. from the UMinnesota in 1995, trained in the area of partial differential equations. He did his postdoctoral work at MSRI (1995-96) and UChicago (1996-98), before joining the Department of Mathematics at Ohio State University as a faculty member in 1998. His research interest is the reaction-diffusion equation with applications to ecology, evolution, and epidemiology. Dr. Lou served as an Associate Director of the Mathematical Biosciences Institute from 2009-13.

Panelists: Julien Arino (UManitoba), Jacques Belair (UMontreal), Jingan Cui (BeijingUCivilEng&Archit), Meng Fan (NENormalU), Jane Heffernan (YorkU), Zhen Jin (ShanxiU), Michael Li (UAlberta), Wei Lin (FudanU), Wendi Wang (SouthwestU), James Watmough (UNewBrunswick), Yanni Xiao (XianJiaotong U), Huaiping Zhu (YorkU)

Organizers: Centre for Disease Modeling (CDM), Chinese Society for Mathematical Biology (CSMB)

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