Brown / BU / UMass Dynamics & PDE Seminar

Spring 2022 Host: Boston University

Wednesday, April 27, 2022

The Division of Applied Mathematics at Brown University, the Department of Mathematics and Statistics at Boston University, and the Department of Mathematics and Statistics at the University of Massachusetts Amherst hold joint seminar events on topics related to PDEs and dynamical systems, broadly construed. For more information, visit our [website](#) or contact the organizers:

Cole Graham (cole_graham@brown.edu), Jonathan Jaquette (jaquette@bu.edu), Tony Wong (t_wong@brown.edu), Ryan Goh (rgoh@bu.edu).

Location and parking information

MCS Building Room B39 (1pm-3pm) and B29 (3pm-)
111 Cummington Mall,
Department of Mathematics and Statistics,
Boston University, Boston, MA 02215.

Parking info: Please contact Jonathan if you need to arrange parking nearby.

Program

Part I: MCS Building B39

1:00 – 1:20 Zachary William Bezemek (BU)
Rates of homogenization for fully-coupled McKean-Vlasov SDEs via the Cauchy-Problem on Wasserstein Space

1:25 – 1:45 Paul Blochas (U of Rennes I)
Uniform Asymptotic Stability for Convection-Reaction-Diffusion Equations in the Inviscid Limit Towards Riemann Shocks

2:00 – 2:20 Constantin Arnscheidt (MIT)
Rate-induced collapse in evolutionary systems

2:25 – 2:45 Anastassiya Semenova (ICERM, Brown)
Superharmonic Instability of Stokes Waves

Part II: MCS Building B29

3:00 – 4:00 KEYNOTE: Gigliola Staffilani (MIT)
The Schrodinger equations as inspiration of beautiful mathematics

4:30 – 4:50 Dominic Skinner (MIT)
Improved bounds on entropy production in living systems

4:55 – 5:15 Aric Wheeler (Indiana U Bloomington)
Turing bifurcation in systems with conservation laws