

# Brown / Boston University Dynamics & PDE Seminar

Fall 2016 Host: Boston University

**December 14, 2016**

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

<http://www.brown.edu/campus-life/events/joint-dynamics-seminar/>

Dave Kaspar (david\_kaspar@brown.edu) & Kelly McQuighan (kmcquigh@bu.edu)

## Location and parking information

MCS Building, Room B21  
111 Cummington Mall  
Department of Mathematics and Statistics  
Boston University

Parking is available in the Warren Towers Garage located at 700 Commonwealth Avenue. If you have made arrangements with the organizers to obtain a parking pass, simply give your name to the garage attendant. Other parking information is available at: <http://www.bu.edu/parking/lots-locations/family-guests-and-visitor-parking/>.

## Program

- 2:00 – 2:30 Nathan Tutz (UMass Amherst)  
*Global flows with invariant measures for a family of almost inviscid SQG equations*
- 2:30 – 3:00 Xiaoning Zheng (Brown)  
*A spectral element method for computational fluid dynamics with its applications*
- 3:30 – 4:30 KEYNOTE: Gigliola Staffilani (MIT)  
*Dispersive and wave equations with random initial data*  
Abstract: In this seminar I will be introducing a selection of well-posedness results in which randomness is exploited. I will briefly present the work of Burq-Tzvetkov for the NLW and the work of Bourgain for the NLS equation and then I will move to more recent results and open questions.
- 5:00 – 5:30 Sameer Iyer (Brown)  
*Global-in-x steady Prandtl expansion over a moving boundary*
- 5:30 – 6:00 Domenico Bullara (Brandeis)  
*Turing patterns without diffusion: how the zebrafish got its stripes*
- 6:15 – Pizza

