

12<sup>th</sup> Annual Northeastern

# *Granular Materials Workshop*

Friday June 6<sup>th</sup>, 2014

School of Engineering, Brown University

- 8:00am-9:30am Breakfast and registration
- 9:30am-10:10am **Invited talk: Ruben Juanes**, MIT, *Earthquakes, multiphase flow, and the poromechanics of faults.*
- 10:10am-10:30am Vikrant Yadav, Clark University, *Experimental study of channelization in cohesive granular media due to sub-surface flows.*
- 10:30am-11:00am Coffee break
- 11:00am-11:40am **Invited talk: Eric Brown**, Yale University, *Shear thickening in concentrated suspensions.*
- 11:40am-noon Sachith Dunatunga, MIT, *Simulation of granular flow using the material point method.*
- noon-1:30pm Lunch and poster session
- 1:30pm-2:10pm **Invited talk: Steve Sun**, Columbia University, *A DEM-LBM analysis on permeability evolutions during the formation of a dilatant shear band.*
- 2:10pm-2:30pm Jay Tang, Brown University, *High permeability and efficient relaxation of agar gel - An ideal substrate for bacterial swarming.*
- 2:30pm-2:50pm Shomeek Mukhopadhyay, Yale University, *Transiently jammed fronts in shear thickening suspensions under impact.*
- 2:50pm-3:10pm Coffee break
- 3:10pm-3:30pm Francisco Lopez Jimenez, MIT, *Healing of defects in granular crystals.*
- 3:30pm-3:50pm Kai Zhang, Yale University, *Packing efficiency of hard sphere mixtures and glass-forming ability of metallic glasses.*
- 3:50pm-4:30pm **Invited talk: Ken Kamrin**, MIT, *Modeling the nonlocal oddities of granular flow.*
- 4:30pm-5:00pm Discussion and wrap-up