Schedule for 14th Northeast Granular Workshop
University of Massachusetts Amherst
1630 Lederle Graduate Tower
Friday June 3rd, 2016

9-9:25 Registration, refreshments

Invited talks 30 mins talk + 6 mins questions; Short talks 10+2 mins

Session 1 Glassy grains and memory Chair: Shubha Tewari
9:30-10:06 Joseph D Paulsen Multiple memory formation in a sheared granular suspension
10.06-10:18 Meng Fan The effects of cooling rate on reversibility and elasticity in model glasses
10:18-10:30 Kabir Ramola, Disordered Contact Networks in Jammed Packings of Frictionless Disks
Coffee/Posters

Session 2 Erosion and flow initiation Chair: Mark Shattuck
11:00 – 11:36 Arshad Kudrolli Sediment transport and channelization in rivers and fractures
11:36 – 11:48 Patrick Mutabaruka Triggering mechanisms of immersed granular avalanches
11:48 - 12:00 Sumit Birwa Distribution of unjamming times of a vibrated granular hopper
Lunch

Session 3 Designed granular media Chair: Corey O’Hern
1:15 - 1:27 Craig Maloney Gelation and mechanical response of patchy rods.
1:27 – 2:03 Aparna Baskaran Active fluids and granular fluids: Comparing two inherently non-equilibrium systems
2:03 – 2:15 Lee Walsh Noise and diffusion in vibrated self-propelled granular particles
2:15 – 2:25 Organizational discussion
Coffee/Posters

Session 4 Breaking down granular matter Chair: Don Candela
3:00 - 3:12 David Cantor Bonded-Cell method for particle crushing in 3D
3:12 - 3:24 Guga Gogia Emergent Phenomena in 2D Dusty Plasma Crystals
3:24 - 4:00 Nick Gravish Ant collective construction and locomotion in granular substrates
**Poster presentations**

Hamed Abdi

*Paramagnetic Colloids Under Rotating Fields: From Chain Through Chaos to Clusters and Molecules*

Abe Clarke

*Geometric strengthening of fluid-sheared granular beds*

Keely Criddle

*3D Flow through Porous Media*

Omer Gottesman

*Crumpling dynamics and the evolution of damage networks*

Deepak Kumar

*Granular self organization by autotuning of friction*

Charles Lewis

*Cohesion amongst Grains in Charged Powders*

Daren Liu

*Continuum Modeling of Granular Flow Down Heaps*

Rijan Maharjan

*A new state transition in the rheology of dense suspensions*

Neil Shah

*Simulation of the effects of wall friction on hopper flow rates*

Peter Williams

*Modelling the mRNA-Ribosome Complex: A study of polymer diffusion in the bacterial cytoplasm*