



9th Annual

Northeastern Granular Materials Workshop

Friday June 17th, 2011

Hosted by: MIT, Department of Mechanical Engineering

Schedule

All talks and soundbites are in room 3-133; posters and lunch are in the Spofford Room.

- 8:30-9:30 Breakfast and registration
- 9:30-9:40 Welcome
- 9:40-10:10 **Vinothan Manoharan**, Harvard University: *A particle walks into an interface ...*
- 10:10-10:40 Coffee Break
- 10:40-noon Soundbites (4+1 minutes each, schedule below)
- noon-2:00 Lunch and posters (Spofford Rm)
- 2:00-2:30 **Katia Bertoldi**, Harvard University: *Soft grains: Functionality through instabilities and deformations*
- 2:30-3:00 **Mark Shattuck**, City College of New York: *Exploring (NESS) Non-equilibrium-Steady-State*
- 3:00-3:30 Coffee Break
- 3:30-4:00 **Dan Rothman**, MIT: *Measuring Pi in Stream and Valleys*

Soundbite schedule

	Author	Title	Notes
1	Dawn Wendell (MIT)	<i>Increasing the energy efficiency of digging in granular materials</i>	
2	David Hennan (MIT)	<i>Elasticity of granular materials</i>	
3	Julien Chopin (Clark University)	<i>Building granular towers one drop at a time</i>	
4	Justin Kao (MIT)	<i>Pattern formation in coating flows of suspensions</i>	
5	Faith Göncü, (University of Twente)	<i>Effect of particle friction and size distribution on macroscopic stress-strain relationship of sphere packings</i>	

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6	Nadia Cheng (MIT)	<i>Jamming as a tunable-stiffness mechanism for soft robotics: How grain properties factor into the design space</i>	
7	Carl Schreck (Yale University)	<i>Vibrational density of states for granular solids</i>	
8	Pawel Zimoch (MIT)	<i>Capillary breakup rheometry of shear-thickening suspensions</i>	
9	Etienne Marcotte (Princeton University)	<i>Low-coordinated ground states using monotonic convex pair potentials</i>	
10	Hansjoerg Seybold (MIT)	<i>How springs split: theoretical predictions and field observations of bifurcation angles</i>	
11	K. Vijay Kumar (Yale University)	<i>Jammed states of bumpy spherical particles</i>	
12	Andreea Panaitescu (Clark University)	<i>Crystal nucleation and growth in a cyclically sheared granular packing</i>	
13	Daniel Reeves (MIT)	<i>Dynamics of chemical deterioration near the surface of rocks</i>	
14	Adam Hopkins (Princeton University)	<i>Structural diversity of the densest binary sphere packings</i>	
15	S. S. Ashwin (Yale University)	<i>Basin volumes on the density landscape: Basin profile function approach</i>	
16	Ken Kamrin (MIT)	<i>A nonlocal rheology for flowing granular materials</i>	
17	Robert Hoy (Yale University)	<i>Progress in enumerating sticky sphere packings</i>	
18	Steven Keating (MIT)	<i>Design using jammable granular systems</i>	