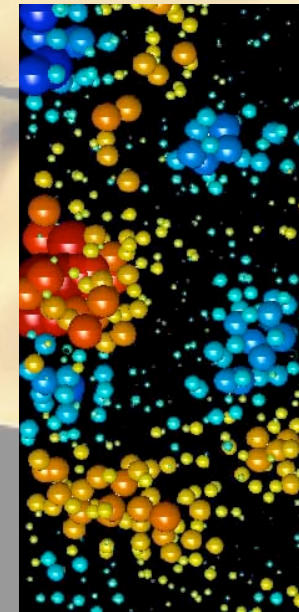
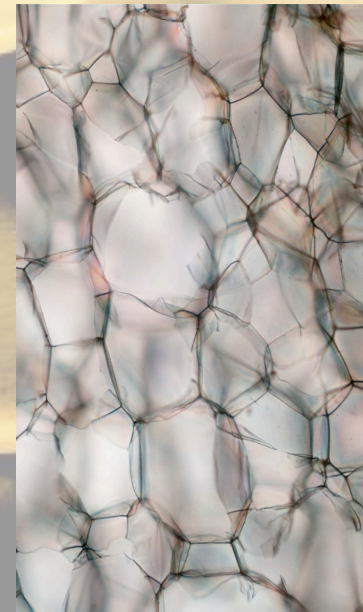
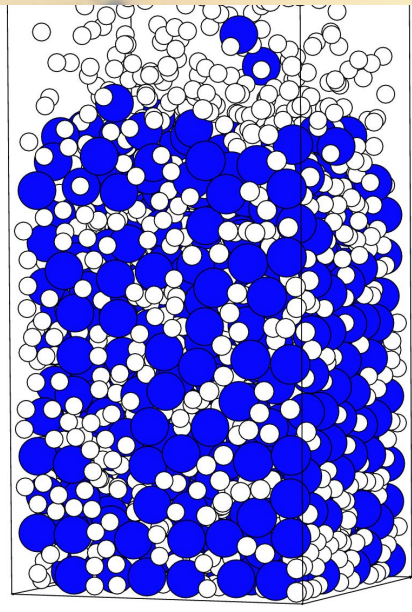
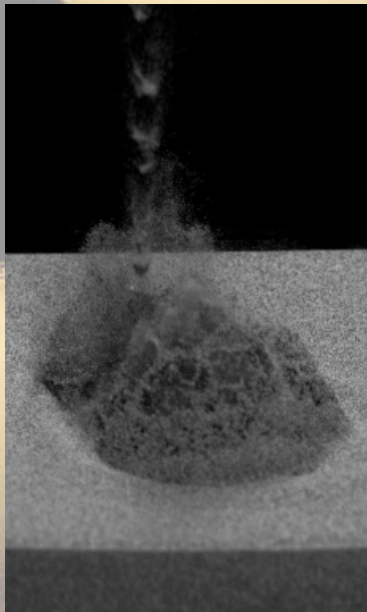


JMBC Workshop

“Statics and dynamics of soft and granular materials”

Drienerburgh, University of Twente, February 25 - March 1, 2013

Speakers: Dirk van der Ende - Nico Gray - Detlef Lohse - Stefan Luding - Martin van Hecke
Martin van der Hoef - Devaraj van der Meer - Peter Schall - Vincenzo Vitelli



Many materials, often grouped together using the term ‘soft matter’, share common characteristics and behavior: For example, the materials consist of macroscopic particles, larger than the molecules that build up the world around us. They jam when flow is about to stop, and unjam just before flow starts. The static (‘solid’) situation is often characterized by a high degree of disorder, inhomogeneity and anisotropy, while the dynamic (‘fluid’) situation is frequently dominated by dissipative interaction forces

leading to a dissipation time scale that interacts with other time scales in the system. Finally, there is the role of the interstitial fluid that resides between the particles and may mediate thermal (Brownian) motion, in the case of colloids, or hydrodynamic interactions (drag) in the case of macroscopic grains. This course, aimed at graduate students, will provide an introduction to this type of materials and discuss many of the phenomena mentioned above both as an overview and in the context of actual research.

**PROGRAM JMBC Workshop "Statics and dynamics of soft and granular materials"
(Drienerburght, University of Twente, February 25, 2013 - March 1, 2013)**

	MONDAY February 25, 2013	TUESDAY February 26, 2013	WEDNESDAY February 27, 2013	THURSDAY February 28, 2013	FRIDAY March 1, 2013
09:00 - 10:45		Granular avalanches (Nico Gray) ----- Student talks	Simulation of granular two-phase flows 1 (Martin v/d Hoef)	Rheology and microstructure of dispersions (Dirk v/d Ende)	Granular matter and interstitial fluids (v/d Meer/Luding)
10:45 - 11:15	Welcome	coffee & tea	coffee & tea	coffee & tea	coffee & tea
11:15 - 12:15	Introduction (Devaraj v/d Meer)	Particle segregation in granular free-surface flows (Nico Gray)	Simulation of granular two-phase flows 2 (Martin v/d Hoef)	Student talks	Impact on granular solids (Detlef Lohse)
12:15 - 13:30	lunch	lunch	lunch	lunch	
13:30 - 15:15	Mechanical meta materials 1 (Martin v Hecke)	From particle description to continuum rheology (Stefan Luding)	Shocks in fragile matter 1 (Vicenzo Vitelli)	Jamming and glassy behavior in colloids and grains 1 (Peter Schall)	
15:15 - 15:45	coffee & tea	coffee & tea	coffee & tea	coffee & tea	
15:45 - 17:30	Mechanical meta materials 2 (Martin v Hecke)	What is rheology about? (Dirk v/d Ende)	Shocks in fragile matter 2 (Vicenzo Vitelli)	Jamming and glassy behavior in colloids and grains 2 (Peter Schall)	
18:30 - 21:00				Conference dinner	

Registration: <http://www.jmburgerscentrum.nl/formulier/6/JMBC-PhD-Course.htm>

Tuition fee: University PhDs/postdocs/staff Netherlands: €250; idem other countries: €400; others: €1,000

More information: d.vandermeer@utwente.nl