Spring 2007 COLLOQUIUM SERIES

GRANULAR AND MULTIPHASE FLOWS

Sponsored by

Mechanics Research Communications and the Granular Science Laboratory

Prof. Michel Louge

Cornell University
Mechanical and Aerospace Engineering
Ithaca, New York 14853

April 9, 2007
11:30 a.m. – 1:00 p.m
MEC 224

Granular Flows and Surface Density on Desert Dunes

Granular flows are ubiquitous and a challenge to our understanding. Grains can behave as a solid, a liquid or a dense gas, all coexisting within the same gravity-driven flow. The talk will focus on the role of packing density in flows on rigid inclined surfaces, discuss the corresponding theories, numerical simulations and experiments, and show the results of recent field measurements of surface density on sand dunes.

Professor Louge conducted his graduate research at Stanford University's High Temperature Gas Dynamics Laboratory, and then worked for a year as a process development engineer at Shell International in The Netherlands, where he contributed to new process designs involving circulating and dense-phase fluidized beds. He joined the Cornell faculty in 1985. He is a member of the American Society of Mechanical Engineers, and the American Institute of Chemical Engineers.

For further information, please contact Dr. A. Rosato, ME Department (rosato@adm.njit.edu; 973-596-5829), or Ms. Barbara Valenti (Valenti@adm.njit.edu; 973-596-3332)