Center for Scientific Computation And Mathematical Modeling

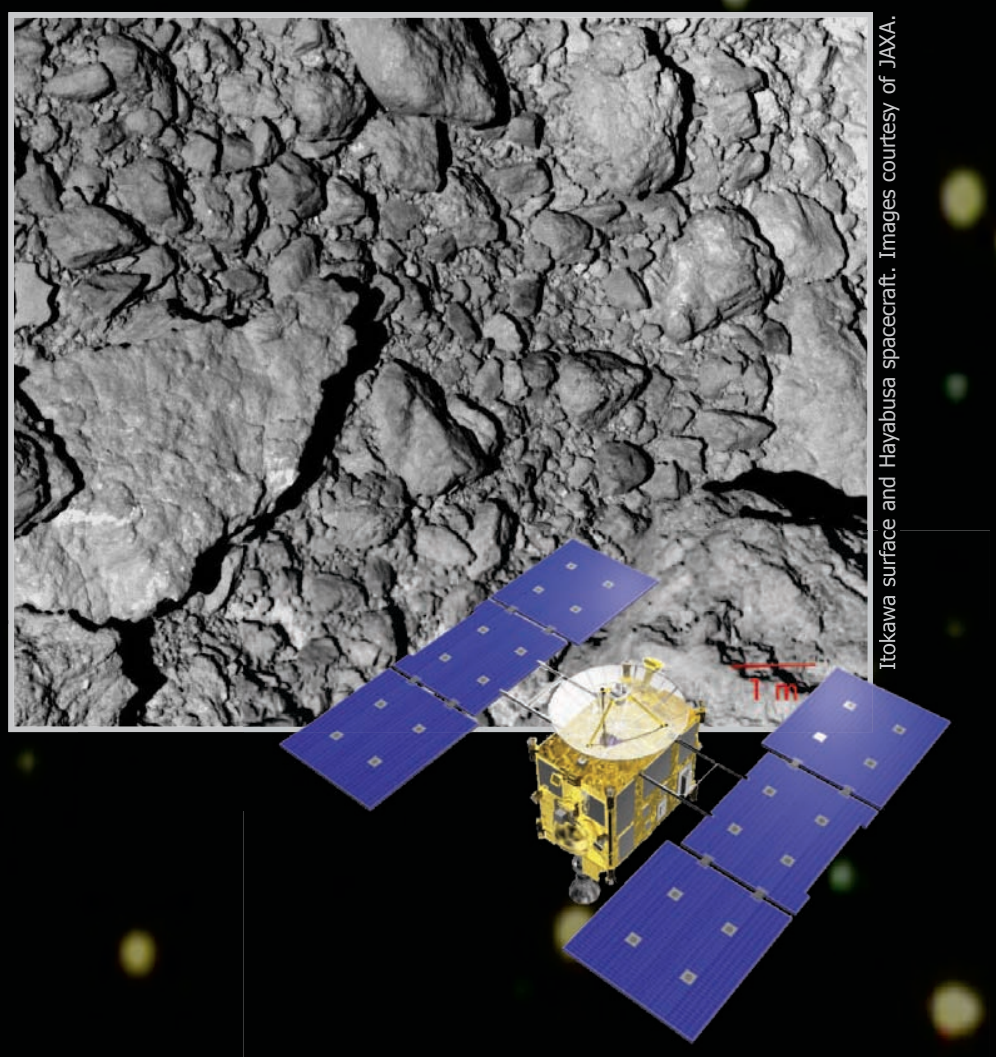
University of Maryland, College Park

Workshop Announcement

2011 Interdisciplinary Summer School

Granular Flows: From Simulations to Astrophysical Applications

June 13-17, 2011



Itokawa surface and Hayabusa spacecraft. Images courtesy of JAXA.

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A limited number of openings with partial funding are available for researchers in the early stages of their career. To apply, RSVP at:
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Full consideration will be given to graduate students and post-doctoral fellows who are interested in attending the full program and apply before the deadline of **March 25, 2011**

For more information:

Website: **www.cscamm.umd.edu/programs/grf11**

Email: **grf11@cscamm.umd.edu**

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Scientific Background

Granular flows are encountered in a wide range of astrophysical applications from asteroids to planetary rock avalanches. Our knowledge about these flows is exploding due to recent and planned robotic missions to various asteroids, comets, and other planetary bodies. The trove of data is being analyzed now, with patterns of granular arrangements and samples of granular materials returning for analysis. At the same time, significant progress has been made over the last two decades to elucidate the physics of granular flows, from the description of the jamming transition, to analysis of segregation and 3-D flows. For basic physics of granular flows, these new observations offer an unprecedented opportunity to apply the knowledge gained in the last decades on granular flows, and to expand the test of models into a regime of varying gravity, in particular the very low gravity of asteroids.

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CSCAMM is a part of the College of Computer, Mathematical and Natural Sciences

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