

SPACE AND COSMIC RAY PHYSICS SEMINAR

*University of Maryland
Computer & Space Sciences Building, Room 2400
4:30 PM Monday, February 7, 2005
Coffee, Tea & cookies 4:00-4:30 PM*

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Deep Impact Expectations for July 4, 2005

The Deep Impact mission launched January 12, 2005 to Comet 9P/Tempel 1. Impact is scheduled for 06:00 UT July 4, 2005 by the copper-loaded Impactor spacecraft. It carries an imaging system with no filter, data are relayed to the flyby spacecraft then to Earth. The impactor will be run over by the on-coming comet at 10.2 km/s. The impactor will disintegrate upon impact, the resulting shock wave will excavate a crater, debris will be ejected, and some will fall back to the comet. We anticipate a crater anywhere from 100-200 m diameter and 25-50 m deep. The Flyby spacecraft carries two telescopes, two imagers and an infrared spectrometer and will observe the impact and its aftermath. The interior of the crater will be examined for fresh, primordial material that will constrain the composition of the early, distant (cold) solar system. Comparison between the surface and interior should tell us about crustal formation on comets. The porosity of the comet will be constrained by the nature of the ejected debris. This is a blast!

<http://space.umd.edu/seminars>

Sponsored by: Department of Physics and the Institute for Physical Science and Technology, University of Maryland. For information call Matthew Hill at (301) 405-6237 or go to the website given above. (A PDF file of this announcement is available for download and posting it at your institution is encouraged and appreciated.)

For free parking please park in lot DD or anywhere on levels 1-2 in lot B (the big parking garage) after 4:00 pm. Make sure that you park in a spot WITHOUT a parking meter. More parking information is at the website.