SPACE AND COSMIC RAY PHYSICS SEMINAR

University of Maryland Computer & Space Sciences Building, Room 2400 4:30 PM Monday, September 27, 2004 Coffee, Tea & Cookies 4:00-4:30 PM

Bonnard J. Teegarden

Laboratory for High Energy Astrophysics NASA/Goddard Space Flight Center, Greenbelt, Maryland

INTEGRAL: A Space Observatory for Gamma-Ray Astronomy

INTEGRAL (International Gamma-Ray Astrophysics Laboratory) is new observatory-class mission of the European Space Agency designed to study the celestial hard X-ray/gamma-ray spectrum over the 20 keV - 10 MeV range. Launched in mid-October 2002, the observatory has operated nearly flawlessly and has already produced an impressive array of results. There are two primary and two secondary instruments on board, all co-aligned. The primary instruments are a cooled-germanium spectrometer and a CdTe imager. With these new technologies INTEGRAL has substantially improved energy and angular resolution relative to its predecessor the Compton Gamma-Ray Observatory. This talk will give an overview of the early results heavily weighted by the speaker's personal interests. Some of the "hot topics" to be covered are: 1) discovery of a new class of hard x-ray binary sources 2) gamma-ray burst results, including the follow-up detection of an X-ray halo 3) gamma-ray line detections from the galactic center region.

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.