

AEROSPACE & MECHANICAL ENGINEERING



**2005 COLLOQUIUM 2006
SEMINARS ARE OPEN TO THE PUBLIC**

**INFORMAL COFFEE PERIOD BEFORE THE SEMINAR IN ROOM 365, ENGR. BLDG.
UNIVERSITY OF NOTRE DAME, NOTRE DAME, INDIANA 46556**

SPEAKER: Professor Amitabha Ghosh
Department of Mechanical Engineering
Indian Institute of Technology Kanpur
Kanpur, India

**TOPIC: REVISITING NEWTON'S LAWS: POSSIBLE
MODIFICATION AND COSMOLOGICAL CONSEQUENCES**

DATE: Friday, October 28, 2005

TIME: 3:30 p.m.

PLACE: 129 DeBartolo Hall

Abstract

Rarely one gets an opportunity to revisit Newton's Laws of Motion after these are introduced in the senior school level. Some problems with these laws will be discussed and a modified form of the law, based on Extended Mach's Principle, will be proposed. It will be shown how this resolves all the problems associated with the laws of motion, exact equivalence of inertial and gravitational masses will be proved, and a number of unresolved problems in the solar system dynamics will be solved. Finally, it will be demonstrated how this simple model can lead to some startling consequences for the concept of the cosmos currently accepted.

**NOTE: *If you are interested in meeting individually with
Prof. Ghosh, please contact Evelyn at 631-5431.***