

DEPARTMENT OF ASTRONOMY & ASTROPHYSICS

ASTRONOMY SEMINAR

September 20, 2011

Speaker : Sumedh Anathpindika
IIA, Bangalore

Title : Aspects of triggered star-formation

Day, Date & Time : Tuesday, September 27, 2011 at 1600 hrs

Venue : Lecture Theatre (AG-66)

(A. Gopakumar)

Abstract

While general features of stellar birth are now relatively well understood, the assembly of star-forming gas is still a mystery. Legacy surveys of star-forming clouds in various bands of infra-red wavelengths over the last decade, and more recently the Herschel space observatory, have, in general, suggested star-forming clouds to be dense and filamentary. Understanding the physical conditions in these clouds, and the processes leading to their formation presage vital questions such as the evolution of prestellar cores, and eventually the origin of the stellar initial mass function. Here I wish to draw your attention to the influence of shocks on quiescent molecular clouds. I have examined the problem using numerical hydrodynamics, some results from which will be presented.