The Institute of OPTICS **Research Seminar** University of Rochester

Graphics Card Programming: Fun & Physics

Richard Edgar
Physics and Astronomy
U of R

PhD in Theoretical Astrophysics
Cambridge University, 2003
U of R 2005 -

This talk will describe an on-going project
to utilize clusters of graphic cards to do
high-speed processing of astronomical image data.

2:30 pm, Monday, September 24
Sloan Auditorium
Refreshments follow

Graphics Card Programming: Fun & Physics
Dr. Richard Edgar

Many computers contain a tremendously powerful parallel processing device, disguised as a graphics card. The ever increasing demands of modern computer games have prompted an explosion in the capabilities of graphics cards. Recently, manufacturers have started to offer compilers and libraries which make general purpose programming on graphics cards much easier. I will present the results of some recent experiments we have conducted, and our plans for the future.

I obtained my PhD in theoretical astrophysics at the University of Cambridge in 2003, before working for two years. In 2005, I moved to Rochester, where I'm working on planet-disc interactions with Alice Quillen.