

**Department of Physics
COLLEGE OF ARTS & SCIENCES**

**SUMMER RESEARCH OPPORTUNITIES
FOR UNDERGRADUATE WOMEN**

APPLICATION DEADLINE: March 1, 2011

The Department of Physics is pleased to offer the following research project for the summer of 2011. Interested students are urged to contact the faculty member(s) directing the project that most interests them. By contacting the faculty member, you can discover more about the project, learn what your responsibilities will be and, if possible, develop a timetable for the twelve-week research period.

THE FORMATION AND EVOLUTION OF SOLAR SYSTEMS

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Project Description

The Formation and Evolution of Solar Systems

Dr. Mike Sitko's current research program includes the study of the planetary systems, our own solar system and those forming around other stars, using imaging and spectroscopic techniques. In particular, the light that is scattered and thermally emitted by cosmic dust grains in these systems provides valuable information about how they form and evolve. Throughout 2011 Dr. Sitko will be observing the emission given off by "baby" solar systems using NASA's Infrared Telescope Facility (IRTF) on the summit of Mauna Kea (Hawaii). Comet Garradd, containing remnant material from the formation of our own solar system, will also be observed. The student will have the opportunity to learn the use of astronomical electronic detectors, and to become involved with the processing and interpretation of the data obtained.