

**DEPARTMENT OF PHYSICS
McMicken-College of Arts & Sciences**

**SUMMER RESEARCH OPPORTUNITIES
FOR UNDERGRADUATE WOMEN**

APPLICATION DEADLINE: MARCH 1, 2005

The Department of Physics is pleased to offer the following research project for the summer of 2005. 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.

Spectroscopic Studies of Comets

Professor Mike Sitko

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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 formed and evolved. In June and July Dr. Sitko will be observing Comet Tempel 1 using NASA's Infrared Telescope Facility (IRTF) on the summit of Mauna Kea (Hawaii) as part of a campaign to monitor the activity of this comet before and after it is impacted by the projectile fired from NASA's Deep Impact probe on July 4. The student will have the opportunity to learn the use of astronomical electronic (CCD) detectors, and to become involved with the processing and interpretation of the data obtained.