

Department of *Physics*
COLLEGE OF *Arts and Sciences*

**SUMMER RESEARCH OPPORTUNITIES
FOR UNDERGRADUATE WOMEN**

APPLICATION DEADLINE: March 1, 2013

The Department of Physics is pleased to offer the following research project for the summer of 2013. 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.

Research in GPU Computing

Professor Michael D Sokoloff
Department of Physics
Office Room and Building Room 411 Geology/Physics
Cincinnati, OH 45221-0011
Tel: (513) 556-0533
Email: mike.sokoloff@uc.edu

Project Description

The student will study and develop parallel codes which run on so-called general purpose graphics processing units (GPUs) using the CUDA program language for nVidia GPUs. We are looking for a student with significant programming skills, with good knowledge of C++ or C and some object-oriented language. No knowledge of physics is required. Some knowledge of statistics would be useful, but not necessary. We are collaborating on this project with Karen Tomko from the Ohio Supercomputer Center. The student will work as part of a team including faculty, post-docs, graduate students, and probably other undergraduates. Two previous WISE students have continued working with us past the end of the summer program and extended their work to complete Capstone Projects. We anticipate similar opportunities will be available to a WISE student who works with us this summer.