

**Department of Physics
MCMICKEN COLLEGE OF ARTS AND SCIENCES**

**SUMMER RESEARCH OPPORTUNITIES
FOR UNDERGRADUATE WOMEN**

APPLICATION DEADLINE: March 3, 2008

The Department of Physics is pleased to offer the following research project for the summer of 2008. 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.

ANALYSIS OF DATA FROM THE BABAR EXPERIMENT

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Project Description

We are analyzing very large data samples from the BaBar experiment at the Stanford Linear Accelerator Center. However, the student will be based in Cincinnati. Most of our analyses relate to decays of mesons with charm quarks. No previous knowledge of particle physics or computer programming is required. The student will learn many aspects of data analysis including aspects of computer programming (using the ROOT package) and statistics. The student will also learn some particle physics. Along with the faculty, the local group includes both graduate and undergraduate students.