

RESEARCH EXPERIENCE FOR UNDERGRADUATES

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Each year the Research Experiences for Undergraduates (REU) program at the Indiana University Cyclotron Facility brings about a dozen undergraduates to Bloomington for a ten-week program. Its aim is to introduce promising students to a research environment with the hope that they will be encouraged to pursue a career in the sciences. Students are placed with advisors, usually selected from the faculty and staff of the Cyclotron Facility or the Nuclear Theory Center, who supervise them in special projects during the course of the summer. In addition to the research project, the program at IUCF includes special seminars, a machine shop course, lessons in scientific computation, a discussion of scientific ethics, and social activities. This summer, thirteen students were supported by NSF funds, including 7 students working on projects at IUCF and 6 students working on projects at the IU Department of Physics. There were several other IU undergraduate students in the laboratory working on projects related to LENS and the MPRI facility.

The students from the summer, 2004 program who worked on projects associated with IUCF are listed below, along with their home institutions, project titles, and advisors.

Tom Duselis, Purdue University

“Development of a LENS Moderator Level Sensor”

Advisor: David Baxter

James Eddy, Augustana College

“Evaluation of Range Compensator Fabrication for MPRI”

Advisor: Chris Allgower

Christopher Johnson, Butler University

“Production and Verification of Spread-Out Bragg Peaks”

Advisor: Mark Wolanski

Colin McClelland, Wabash College

“Elements and Design of a Neutron Chopper”

Advisor: Mark Leuscher

Philip Powell, Harvard University

“Lattice QCD Calculation of Running Quark Masses”

Advisors: Adam Szczepaniak and Patrick Bowman

Jeremy Smith, Northern Arizona University

“Testing the Characteristics of High-Resolution Silicon Strip Arrays”

Advisor: Romualdo deSouza

Ethan Triplett, The Ohio State University

“Space Charge Compensation and Proton Transport for the LENS Ion Source”

Advisor: Vladimir Derenchuk