Applied Nuclear Physics Curriculum

Faculty in the Department of Physics and Astronomy, in association with the Institute of Nuclear and Particle Physics (INPP), are extending our graduate program to include M.S. and Ph.D. degrees based on research in Applied Nuclear Physics. This stream builds on the M.S. with thesis and Ph.D. curricula described on the departmental website site [http://www.phy.ohiou.edu/](http://www.phy.ohiou.edu/). Three courses, all of which are new, are required for those wishing to graduate within this stream. They are:

**Introduction to Radiation** (offered in Fall 2007 under the experimental number PHYS 469L/569L—2 credits, 3:10-4:00 TTh). This course is required for the Applied Nuclear Physics stream, but also will serve any student whose research requires the use of radiation. Instructor: Dr. Tom Massey

**604 Experimental Techniques**—(Graduate Nucleons Laboratory to be offered in Winter Quarter 2007-2008—4 credits). This course will be taught in the Edwards Accelerator Laboratory and will have both experimental and seminar components. It is required for the Applied Nuclear Physics stream, and will also satisfy the departmental graduate laboratory requirement. Instructor: Dr. Paul King.

**Applied Nuclear Physics** (4 credits to be taken in the second year of work in the Applied Nuclear Physics stream). The current plan is to create and offer this course in the Fall Quarter of 2008. Instructor to be determined.

The M.S. in Applied Nuclear Physics stream requires the thesis option which is stated on the departmental web-site as: The M.S. degree can be earned by submission of a research thesis with an oral examination and at least 20 credit hours of graduate level lecture or laboratory courses in physics and astronomy. In addition to completing the above three courses and a research thesis students in the Applied Nuclear Physics stream should take as many of the core graduate courses as possible and seek research advisors working in low-energy nuclear physics: At the present time, these include Professors Brune, Grimes and Schiller. In addition, the following Research Faculty are involved with the Applied Nuclear Physics stream: Drs. King, Massey and Voinov. Qualified students may continue in the Department’s Ph.D. program with an emphasis in Applied Nuclear Physics.