

William and Mary Physics Undergrad Receives Major Research Assistantship



Alice Perrin, a senior physics major at The College of William and Mary is the recipient of the 2014-15 Jefferson Science Associates Minority/Female Undergraduate Research Assistantship (JSA MFURA) at Jefferson Lab. Her assistantship project involves setting up a testing facility to measure the performance of 3D printed scintillators to be used in a particle detector.

NEWPORT NEWS, VA – A physics undergraduate at The College of William and Mary has been selected for a research assistantship at the U.S. Department of Energy’s Thomas Jefferson National Accelerator Facility, or Jefferson Lab.

Alice Perrin, a senior physics major from Roanoke was named recipient of the 2014-15 Jefferson Science Associates Minority/Female Undergraduate Research Assistantship (JSA MFURA) at Jefferson Lab.

Perrin is conducting the year-long research assistantship under the supervision of her advisor, W&M physics professor, Wouter Deconinck. Her project involves setting up a testing facility to measure the performance of 3D printed scintillators to be used in a particle detector. The project includes learning how to mix scintillator compounds with photopolymer compounds, performing vacuum and cryogenics tests on sample materials, and using a 3D printer. Her first visit to Jefferson Lab was in September.

The JSA MFURA program at Jefferson Lab offers opportunities to minority and female students pursuing undergraduate degrees in physics. For the selected student, the MFURA program provides a unique opportunity to realize how his or her undergraduate studies translate into real-world research applications and experience. Through the project that the assistantship recipient conducts, the student demonstrates how their physics research is applicable to Jefferson Lab’s nuclear physics program.

This assistantship benefits the student and the lab, according to Elizabeth Lawson, JSA Board liaison and Initiatives Fund program manager. “It provides outstanding opportunities and critical experience for the recipient and provides Jefferson Lab and the broader field of nuclear physics with a source of technical students from underrepresented groups early in their professional careers,” she said.

“The lab provides the students with opportunities not available elsewhere. Being able to conduct research as part of an undergraduate education is a significant advantage for a student at a research university and the role these opportunities play in the overall learning experience is very important,” Lawson added.

Criteria for selection are based on the scientific quality of a candidate’s proposed project, its relevance to the Jefferson Lab scientific program, and the student’s academic record. The assistantship is awarded to eligible undergraduate students who are attending Southeastern Universities Research Association-member universities.

“Miss Perrin’s project description was well written,” commented Jian-Ping Chen, selection committee chair. “The project was carefully planned and directly relevant to Jefferson Lab research. She has an excellent academic record and is qualified to carry out the project.”

The assistantship is supported by the JSA Initiatives Fund Program, an annual commitment from the JSA owners, SURA and PAE Applied Technologies, to support programs, initiatives, and activities that further the scientific outreach, and promote the science, education and technology missions of Jefferson Lab and benefit the lab’s user community. The assistantship provides a stipend to support the student at their university during the academic year, as well as travel funds to visit Jefferson Lab.

Additional information about the assistantship is online at: https://www.jlab.org/div_dept/admin/HR/research/.

Information about the JSA Initiatives Fund program is available at: <http://www.jsallc.org/IF/IFIndex.html>.

Jefferson Science Associates, LLC, a joint venture of the Southeastern Universities Research Association, Inc. and PAE Applied Technologies, manages and operates the Thomas Jefferson National Accelerator Facility, or Jefferson Lab, for the U.S. Department of Energy’s Office of Science.

Jefferson Lab is supported by the Office of Science of the U.S. Department of Energy. The Office of Science is the single largest supporter of basic research in the physical sciences in the United States, and is working to address some of the most pressing challenges of our time. For more information, visit science.energy.gov.

This release is online at: <https://www.jlab.org/news/releases/william-mary-undergrad-receives-jsa-research-assistantship>

Photo and caption available upon request.

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