

ABOUT THE PROGRAM

About the Cornell SRCCS Program

The National Science Foundation (NSF) has awarded us a grant for a summer research program for **upstate New York community college students**. Under this program, four to five students interested in a career in science, engineering, and technology will be invited to participate in cutting-edge research at the Cornell Laboratory for Accelerator-based Sciences and Education (CLASSE). The eight-week program will start **Monday, June 4, 2012 and end Friday, July 27, 2012**. In addition to participation in accelerator research, the program will include formal seminars, formal lectures, tours of research facilities, social and recreational events, and a forum at the program's end in which participants present results of their research. **Participants will receive a stipend of \$3920**. Local group housing will be provided through Cornell University Campus life, if participants prefer not to commute daily.

www.lepp.cornell.edu/Education/SrCcs/

I am very glad that I was able to participate in the SRCCS program, funded by the NSF. I now know that I want to be an experimentalist and that I want to continue on for my PhD.

This program has been truly life changing!

— Virginia Martelli, Tompkins Cortland
Community College (TC3), '10

APPLICATION DETAILS

Your application should include

- A completed application form (available online, at: www.lepp.cornell.edu/Education/SrCcs/)
- A transcript (a photocopy is acceptable).
- 1 letter of recommendation from a professor who is familiar with your potential for research. Letters submitted by fax or email should be followed by the signed originals in U.S. Mail.
- A short (1 or 2 page) personal statement describing your experience, skills, interests, education / career goals, and how participating in this summer research program would help them.

First offers will be made by March 1, 2012. If accepted, you will need to show proof of health insurance coverage for the period of the SRCCS program.

Applications completed after February 15, 2012 may not be considered.

LEPP, the Cornell University Laboratory for Elementary-Particle Physics, and CHES resources have merged and a new lab, (CLASSE), has formed. CLASSE develops and operates facilities and provides infrastructure for the study of beams and accelerators, photon science, particle physics and the early universe, serving students, the public and scientists from Cornell and elsewhere. LEPP's primary source of support is the National Science Foundation.



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SUMMER RESEARCH FOR COMMUNITY COLLEGE STUDENTS

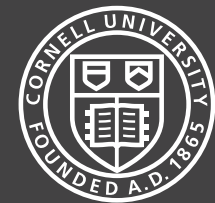
at Cornell University

WORK DIRECTLY WITH CORNELL PHYSICISTS

TAKE PART IN CUTTING-EDGE RESEARCH

RECEIVE ONE-ON-ONE MENTORING

GAIN ACADEMIC AND SCIENTIFIC EXPERIENCE



SRCCS
2012

Apply now online!
Limited openings available

www.lepp.cornell.edu/Education/SrCcs/

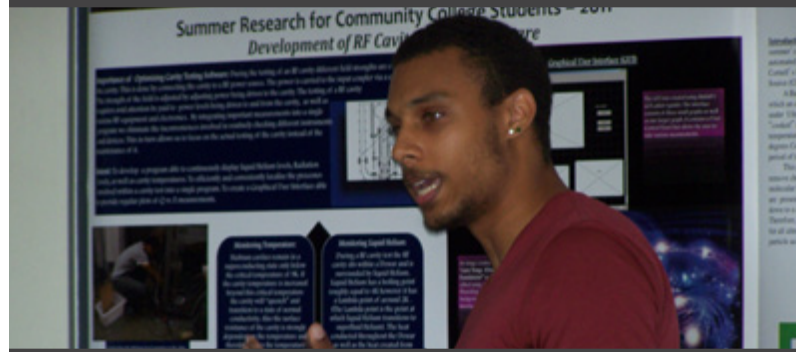
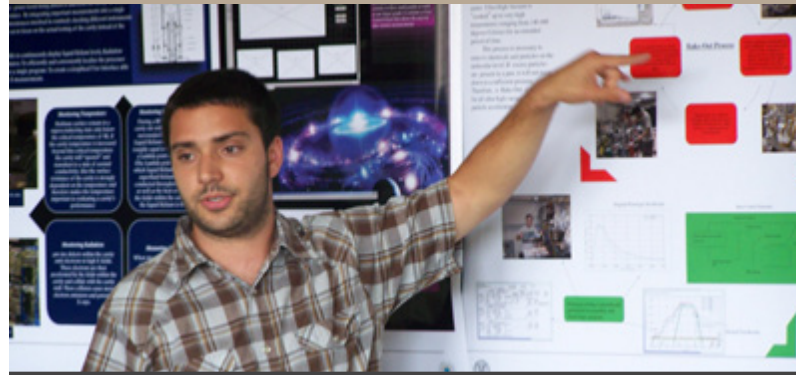
ONGOING RESEARCH

Cornell's SRF group has been a world-wide leader in the field...

Superconducting RF Research

Participants will work in our SRF (Superconducting Radio Frequency) group. This group is a world-leader in the field of microwave superconductivity and its application in high energy accelerators and light sources. Each student will be assigned an individual research project which will be well integrated in our overall cutting-edge research on particle accelerators. Examples of potential projects are conducting surface analysis of niobium, developing electronics and software for instrument control, performing microwave measurements on absorbing materials, and optical inspection of the surface of superconducting microwave cavities. Even though each participant will work on individual projects, being a member of a larger research group, interacting with other undergraduate and graduate students, and contributing to the overall mission of our work will be strongly emphasized. The SRF Laboratory is located on the Cornell campus. It includes machine shops for cavity fabrication, clean-rooms for cavity preparation, chemical rooms for surface treatments, high temperature furnaces for cavity purification, a test pit area for performance testing of the superconducting cavities at cryogenic temperatures, and advanced surface analysis tools.

OPPORTUNITIES ABOUND



EXCITING OPPORTUNITIES

Be a part of this exciting research opportunity!

Mentoring of Participants

Participants in the program will be assigned a mentor (professor, research associate, or graduate student) to define the nature of the research project, to guide the participant's effort through frequent interaction, and to provide one-on-one training. Mentors will also advise on potential college and career options in the physical sciences, and will stay in contact with participants after the summer research program.

Superconducting RF

SRF is a technology in which microwave superconducting cavities are used to efficiently deliver energy to particles in accelerators. These forefront accelerator devices are used in future colliders, advanced light sources, the LHC and the ILC, the world's largest particle physics experiments. Recent research involves the basic science of RF superconductivity, as well as device development.

