



# Los Alamos Space Weather Summer School

## June 6 – July 29, 2016

### Los Alamos National Laboratory, New Mexico

<http://www.swx-school.lanl.gov>

The Los Alamos Space Weather Summer School is accepting applications for its summer 2016 session. This summer school, sponsored by the Institute of Geophysics, Planetary Physics, and Signatures (IGPPS) at Los Alamos National Laboratory (LANL), brings together top space science graduate students and LANL's internationally renowned space scientists to work on challenging space weather topics and instrumentation. Students receive a prestigious Vela Fellowship, technical training, and professional development seminars.

The summer school includes a wide range of topics such as:

- Ring current and radiation belts
- Magnetosphere-ionosphere coupling
- Solar wind dynamics
- Spacecraft charging
- Numerical modeling techniques
- Instrumentation and sensing

*New for this year!*  
*Special short course on*  
*using **Autoplot**, given by*  
*developer **Jeremy Faden***

Possible research projects include:

- Plasma waves in the solar wind and magnetosphere
- Solar energetic particle events
- Diffusion coefficients and radiation belt dynamics
- Van Allen Probes data analysis and modeling
- Scintillating and solid-state radiation detectors
- Thermospheric density and satellite drag

**Program** – Students attend a variety of lectures on space physics and space weather related research topics and gain valuable hands-on experience under the mentorship of a LANL scientist. This program also provides students with opportunities to develop their written and oral communication skills, by presenting their research in a technical forum and in a formal report at the end of the summer school.

**Students** – The program is open to U.S. and foreign graduate students currently enrolled in PhD programs in space physics, planetary sciences, aerospace engineering, or a related field. Program acceptance is based primarily on the student's academic record, list of publications & presentations, and nomination letter. Acceptance will also be based on the student's interest in attending the summer school and the benefit to the student of attendance, as demonstrated in the cover letter. Preference will be given to students who have completed at least their second year of graduate school, although students at any year of school may apply.

**More information and how to apply** – Please visit the Space Weather Summer School website at <http://www.swx-school.lanl.gov> for more information. Applications materials can be sent as email attachments to [swx-school@lanl.gov](mailto:swx-school@lanl.gov).

Please include the following material with your application:

1. Cover letter describing your research interests, why it would benefit you to attend, potential project ideas, and mentor requests
2. Current CV including full list of publications and presentations
3. Undergraduate and graduate transcripts
4. Brief description of your PhD program and how far along you are in that program
5. Nomination letter from your advisor
6. Two additional reference letters if you are NOT enrolled in a U.S. graduate program

Applications will be accepted starting in early January 2016. Applications must be received by February 5, 2016. Acceptance notifications will be sent out by the end of February 2016.

Questions regarding this program can be sent to the summer school director, Misa Cowee, at [mcowee@lanl.gov](mailto:mcowee@lanl.gov).