



# Los Alamos Space Weather Summer School

June 4 – July 27, 2012

Los Alamos National Laboratory, New Mexico

<http://spaceweatherschool.org>

The Los Alamos Space Weather Summer School is accepting applications for its summer 2012 session. This summer school, sponsored by the Institute of Geophysics and Planetary Physics 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 Space Weather School includes a wide range of topics:

- Plasmas physics
- Numerical modeling
- Spacecraft charging
- Astrodynamics
- Radiation belts
- Solar wind physics
- Instrumentation
- Data assimilation

## Possible research projects include:

- PIC code simulation of whistler turbulence
- Solar energetic particle events
- Magnetospheric magnetic field during the substorm growth phase
- Third adiabatic invariant  $L^*$  and radiation belt modeling
- Substorm injections and EMIC waves
- Scintillating and solid-state radiation detectors
- Thermospheric density and satellite drag modeling

*It was an honor to be here and meet great scientists... I learned a lot through the classes and from working with my mentor.*

—Sun Hee Lee,  
University of Alaska,  
Fairbanks,  
2011 participant

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**Experience** – Students attend a variety of lectures on current space weather research topics and gain valuable hands-on laboratory skills. This program also provides students with opportunities to develop their written and oral communication skills, including resume writing and presenting.

**Students** – The program is open to U.S. and foreign graduate students in space physics, planetary sciences, aerospace engineering, or a related field. Program acceptance is based on the student's academic record and nomination letter.

**More information and how to apply** – Please visit the Space Weather School website at <http://spaceweatherschool.org> for more information. Applications 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. Application form (available online)
2. Cover letter describing your interests, possible project ideas, and mentor requests
3. Current resume
4. Transcripts
5. Nomination letter from your advisor

Applications must be received by **Feb. 15, 2012**. Acceptance notifications will be sent by **March 1, 2012**.

Questions regarding this program can be sent to summer school director Josef Koller at [jkoller@lanl.gov](mailto:jkoller@lanl.gov).