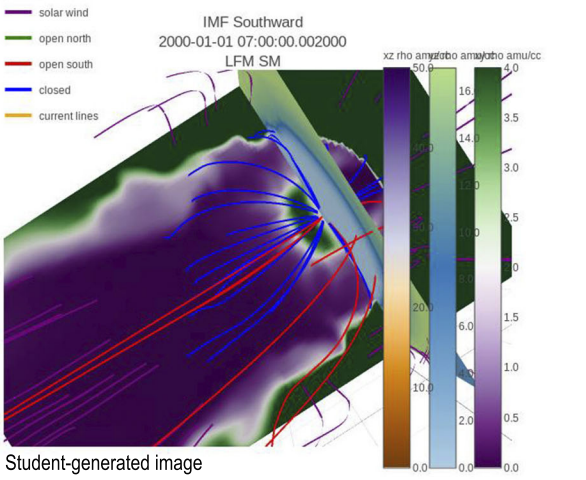
Boulder Space Weather Summer School

Hosted by the National Center For Atmospheric Research

17 July – 30 July 2022 • Boulder, CO

Application Deadline 1 May 2022



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Solar magnetic activity is an awesome cosmic spectacle but it also has tangible consequences for life on Earth. It shapes our planet's space environment and poses hazards for our technological society. This is the science of Space Weather.

The Boulder Space Weather Summer School gives students a comprehensive introduction to all aspects of Space Weather with a particular emphasis on the use of numerical models to understand and predict solar storms and their terrestrial impacts. Taught by a diverse team of expert lecturers from NCAR's High Altitude Observatory, NOAA's Space Weather Prediction Center, the National Solar Observatory, and beyond. Supported by the NSF.

Course Overview

Fundamental Science of the Sun-Earth System:

-Solar Activity, Solar Wind, Magnetosphere, Ionosphere

Socioeconomic Impacts of Space Weather:

-Power Grids, Telecommunications, Satellites, GPS, Aviation, Astronauts, Radiation Hazards

Modeling and Forecasting:

-Triumphs, Tribulations, Assumptions, Limitations

Active Learning:

-Daily Modeling Labs, Data Analysis, Capstone Project

Applications are welcome from graduate students and advanced undergraduates interested in pursuing a career in solar or space physics, as well as space weather practitioners interested in broadening their understanding of the space environment.

The School will provide support for domestic travel and local living expenses for student participants.

This year's location is the Embassy Suites by Hilton, Boulder, CO.

HAO NSF NCAR

For more information and instructions on how to apply see http://www2.hao.ucar.edu/SWSS