

- The [National Student Solar Spectrograph Competition](#) (NSSSC) is Montana Space Grant Consortium's (MSGC's) Education Program for NASA's Interface Region Imaging Spectrograph ([IRIS](#)) mission. Starting in 2011, the yearly competition will involve more than **28 undergraduate interdisciplinary teams** from colleges and universities across the country. Both substantial scholarship prizes and travel prizes will be given in four categories: best design, best build, best science observations, and best presentation of results. **In the first year alone, teams are competing for \$48,000 in scholarships and 16 travel awards to the launch of the IRIS satellite.**
- This is an exciting opportunity for student teams to build a ground based solar spectrograph as part of an undergraduate interdisciplinary team and then travel to Montana to demonstrate their spectrograph's capabilities. **MSGC is pleased to be hosting the NSSSC May 16-18, 2012 in Bozeman, Montana. Spectrograph designs can begin in September 2011 and finish with the competition in Bozeman.**
- **Teams consisting of 3 to 6 students** will demonstrate the resolution and sensitivity of their device by observing absorption lines in the visible spectrum and resolving as many lines as possible. In addition, teams will demonstrate a secondary scientific capability of their spectrograph, e.g. measure line width.
- Teams may apply for **NASA Build Award funding of up to \$2000 / team for project materials.** Priority for build funds will be given to Minority Serving Institutions (MSIs), community colleges and institutions with less aerospace activity.

Competition details and registration information can be found at the NSSSC website:

<http://www.spacegrant.montana.edu/IRIS/index.html>

**National Student Solar Spectrograph Competition**

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**Welcome**  
Montana Space Grant Consortium is pleased to be hosting the National Student Solar Spectrograph Competition May 16-18, 2012 in Bozeman, Montana at the campus of Montana State University.  
This is your chance to build a ground based solar spectrograph as part of an undergraduate interdisciplinary team and then travel to 'Big Sky' country to test it with a unique view of the sun found nowhere else.  
The yearly National Student Solar Spectrograph Competition is MSGC's Education Program for NASA's Interface Region Imaging Spectrograph (IRIS) mission.

**Competition Dates**  
Spectrograph designs can begin in September 2011 and finish with the competition May 16-18, 2012 in Bozeman. Competition details can be found throughout this website.

**Why this Student Competition?**  
Ask yourself the following questions:  

- Are you looking for a real world design problem?
- Do you want to participate on an interdisciplinary team?
- Do you want to travel to the 'Big Sky' state?
- Do you want experience with mechanical components, optics, electronics and software?
- Do you want a chance to win scholarship and travel prizes?

If you answered yes to these questions then this competition is for you! Get your team together and register today.

**Solar Flare Footage**

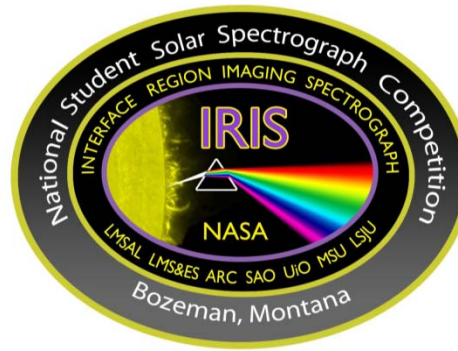
**What is a Spectrograph?**  
  
A Spectrograph is an instrument used to measure properties of light over a specific portion of the electromagnetic spectrum by separating an incoming wave into a frequency spectrum. Spectrographs have a wide range of complexity from as simple as a prism to the cutting edge IRIS spectrograph.

**Bozeman & Southwest Montana**  
  
Photos © Joseph Shaw, Brian Shaw, Randy Larmer, Jason Page

**News Updates**  
NSSSC  
**IRIS NSSSC**  
Registration is open!  
Register your team today for the National Student Solar Spectrograph Competition!  
Join the conversation

**IRIS**  
Interface Region Imaging Spectrograph  
  
IRIS will reveal the dynamics of the sun's chromosphere and transition region and allow us to understand the processes powering them by observing with high resolution in space, time, and wavelength. From its sun synchronous orbit, IRIS will trace the flow of energy and plasma from the photosphere through the chromosphere and transition region into the corona using spectroscopy and imaging in ultraviolet windows between 1300 and 2800 Å.

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- Key registration dates:

February 2011 Applications Available for 2011-2012 Competition

May 30, 2011 Priority Deadline for Applications to be considered for Build Awards

June 2011 Teams Announced for 2011-2012 Competition and Build Awards Distributed

August 30, 2011 Deadline for Late Applications

- The National Student Solar Spectrograph Competition would not be complete without a day to play in the sun of the Big Sky country. We have partnered with [Montana Whitewater](#) to offer some unique Montana experiences on, above and around the Gallatin River in the beautiful Gallatin Canyon. Activities include whitewater rafting, ziplining, fly fishing, and hiking.
- **Help us get the word out to your affiliates and encourage them to register a team by using the simple on-line registration. Consider sponsoring a team and provide travel assistance for a team – this is a great way to partner with a MSI if you don't have an MSI in your state!**
- Questions? See the [NSSSC website](#) or contact Randy Larimer at 406-994-6085 or [rlarimer@ece.montana.edu](mailto:rlarimer@ece.montana.edu)