

Colorado

CAFÉ SCIENTIFIQUE

Tuesday 13 March 2012

at the Wynkoop Brewing Company

<http://www.wynkoop.com/>

Corner of 18th and Wynkoop in LoDo, Denver

About a block from Light Rail. Thirteen minutes by foot from Auraria.

Space Weather: Our Dynamic Sun and Our Vulnerability to It

Frank Eparvier, PhD

Senior Research Scientist, Laboratory for Atmospheric and Space Physics (LASP),

The output of our Sun is constantly changing. Solar flares, coronal mass ejections, sunspots, solar wind all affect the environment of charged particles, magnetic fields, and photons in which our Earth exists. With our increasing reliance upon space-based technology, we've become vulnerable to changes in solar activity. NASA and NOAA are actively researching and monitoring the output of the Sun in order to understand and predict space weather. I will talk about our vulnerabilities to space weather and about how solar instruments built by the University of Colorado's Laboratory for Atmospheric and Space Physics (LASP) for NASA's Solar Dynamics Observatory (SDO) and NOAA's next generation of GOES satellites fit into the space weather picture. The sun's activity is expected to peak for this solar cycle in 2013. Our technology is far more space-dependent than it was 11 years ago: *What should we expect this time?*

EVERYONE IS WELCOME. The discussion starts at 6:30 in the Mercantile Room (no food service there). Come before 6 PM to leave yourself time to get something to eat, or stay and eat afterwards. We end around 8 PM.

There's no charge. The Wynkoop is generously providing the facility; we buy our own drinks. It is first come, first seated, and **seating is limited** so that everyone can take part in the discussion.

The Colorado Café Scientifique is organized by an informal group of faculty from CU and institutions up and down the Front Range, as well as science fans from industry, government and elsewhere. We welcome your input, including ideas for speakers and topics. Bring them with you to the next Café, or e-mail them and any questions to John.Cohen@UCDenver.edu

Essential information about the topic and the event on our Web site at:
<http://CafeSciColorado.org>