## ASTR-7500 ...... Topics in Solar Observation Techniques

Instructors: W. Cao, R. Centeno, S. Cranmer, V. Martínez Pillet, H. Uitenbroek
Time & Place: Spring 2016, Tues/Thurs., 2:00–3:15 pm MT, Duane Physics G-328
Web page: http://lasp.colorado.edu/~cranmer/ASTR\_7500\_2016/

This web-enabled course is the third offering of the George Ellery Hale Collaborative Graduate Education (COLLAGE) Program, a joint effort between CU Boulder, the National Solar Observatory (NSO), New Jersey Institute of Technology (NJIT), University of Hawaii (UH), New Mexico State University (NMSU), Montana State University (MSU), and the High Altitude Observatory (HAO).

In this course we will cover the basics of spectropolarimetric instrumentation and measurement techniques, diagnostics of the plasma properties and magnetic field of the solar atmosphere, occulting coronagraphs, and emission-line spectroscopy of the solar corona. The entire course will be web-cast to participating institutions (with additional instructors lined up to facilitate local discussion). Some material will be pre-recorded for earlier viewing, with the "flipped classroom" model being used for in-class discussion.



At CU Boulder, this course is an elective for APS graduate students. A recommended pre-requisite or co-requisite is Observations, Data Analysis, & Statistics (ASTR-5550).