226 Barnard Hall Bozeman, Montana 59717 (801) 906-1539 roy.smart@montana.edu

EDUCATION

Ph.D., Physics, Expected May 2020

Montana State University, Bozeman, MT

B.S., Physics, May 2015

Montana State University, Bozeman, MT

RESEARCH INTERESTS

Solar Physics: Solar transition region, explosive events, coronal heating. Optics: Computed tomography imaging spectroscopy, photon sieves.

Scientific Computing: Neural networks, evolutionary algorithms, deconvolution.

**EXPERIENCE** 

Graduate Research Assistant

Fall 2015 - Present

Montana State University, Kankelborg Research Group, Bozeman, MT

Associated with MOSES III/ESIS solar sounding rocket:

- Data processing.
- Modeling CCD temperature bias.
- Performing optical alignment.
- Developing ground station software.

 $Graduate\ Teaching\ Assistant$ 

Spring 2016

Montana State University, Bozeman, MT

Lab TA for PHSX 220, Instructor: Dr. Nick Childs

Research Assistant

**Spring 2013 - Spring 2015** 

Montana State University, Kankelborg Research Group, Bozeman, MT Associated with MOSES II solar sounding rocket:

- Performed thermal analysis of optical mount.
- Developed software used on embedded system for command and control of MOSES instrument during flight.
- Supported launch operations.

SELECTED POSTERS

Smart, R., Courrier, H., and Kankelborg, C. (2016), "Preliminary Results of the MOSES II 2015 Flight", AAS/Solar Physics Division Meeting, volume 47, page 309