

XRISM and Atomic Processes in Plasmas

Wednesday, 17 May 2023 14:00 (30 minutes)

The X-ray Imaging and Spectroscopy Mission (XRISM) is a Collaborative Mission jointly developed by NASA and the Japanese Space Agency (JAXA), with the European Space Agency (ESA) participation. It will have two instruments: Resolve - a soft X-ray (0.3-12 keV) spectrometer providing non-dispersive high-resolution X-ray spectroscopy; and Xtend - a 40 arcminute field of view soft X-ray imager. XRISM is scheduled to launch from Japan in May of 2023. The mission is to recover science lost with the demise of Hitomi in 2016. After a 9-month calibration and performance verification phase, the rest of the mission lifetime will be for General Observers worldwide. In this talk I will review the capabilities of XRISM, and some of the science goals for the observations to be carried out during the performance verification phase. I will highlight the fundamental atomic physics knowledge needed in order to interpret XRISM observational data, and also how this impacts the XRISM science.

Presenting Author

Timothy Kallman

Presenting Author Affiliation

NASA/Goddard Space Flight Center

Presenting Author Gender

Male

Country

USA

Presenting Author Email Address

timothy.r.kallman@nasa.gov

Primary author: KALLMAN, Timothy (NASA/GSFC)

Presenter: KALLMAN, Timothy (NASA/GSFC)

Session Classification: Astrophysical Plasmas