

**Name:** Rozenn Boissay-Malaquin

**Code:** 662

**Home institution:** University of Maryland, Baltimore County

**Name of task:** XRISM mission / X-ray Optics Group

**Role in task/ What do you do for CRESST:**

I work on the calibration of the X-ray mirrors for the XRISM mission. In parallel with my main task, I study Active Galactic Nuclei (AGN) emission mechanisms and structures, in particular in X-rays.

**What is your Background:**

I grew up in France and studied Physics Engineering science and Astrophysics in Strasbourg, before obtaining a Ph.D. in Astrophysics in Geneva, Switzerland. I then moved to Boston to work in the Chandra/HETGS group at MIT. I arrived at NASA Goddard in October 2019 to work on the XRISM mission.



**Favorite part of being a CRESST Scientist:**

I am particularly glad to work on the XRISM mission that is such an exciting project! This X-Ray Imaging and Spectroscopy Mission is a unique instrument that will provide higher sensitivity and resolution X-ray spectroscopy of many different astrophysical systems, including AGN. My role in the XRISM group at NASA/GSFC is to perform the calibration of the X-ray mirrors of this satellite and to provide support to the community. I also enjoy continuing my research on AGN and being able to mix technological and scientific aspects in my current occupation.

**Highlight of research as a CRESST Scientist:**

I am studying emission mechanisms and structures of AGN, mostly in X-rays. I am particularly interested in the soft excess feature, present below 2 keV in unobscured AGN, and which origin is highly debated. I also investigate winds, from warm absorbers to ultra-fast outflows (UFOs), using high spectral resolution instruments, characterizing them, and studying their possible impact on the AGN host galaxy.

**Relevant Publications:**

Boissay-Malaquin R., Danehkar A., Marshall H., Nowak M. 2019

Relativistic components of the Ultra-Fast Outflow in the quasar PDS 456 from Chandra/HETGS, NuSTAR and XMM-Newton observations, ApJ 873, 29

Boissay R., Ricci C. & Paltani S. 2016

A hard X-ray view of the soft excess in AGN, A&A 588, 70

Boissay R., Paltani S., Ponti G. et al 2014,

Multiwavelength campaign on Mrk 509. XIII. Testing ionized-reflection models on Mrk 509, A&A 567, 44

**To Contact Rozenn to learn more about her work or collaboration, she can be reached at:**

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