

Report on the 2026 XRISM User's Group Meeting

Date: April 6, 2026

In this meeting, the mission shared presentations regarding several aspects of the mission, and then asked the XUG to consider a key projects category for future proposal cycles.

The presentations included:

- The overall mission status (Rich Kelley)
- The status of the Resolve calorimeter (Caroline Kilbourne)
- The status of the Xtend camera (Eric Miller)
- The status of the GOF activities (Koji Mukai)
- The status of laboratory astrophysics initiatives at LLNL (Nathalie Hell)

The XUG was pleased to learn that the mission is in excellent health, with no limitations in its operations. The mission appears to be performing more target-of-opportunity observations with fairly rapid response times. We are grateful to the instrument teams for continual work on calibration and data processing pipelines. We are also grateful to the GOF for efficient and well-executed proposal reviews.

Independent of these presentations, the XUG is particularly pleased to note that XRISM papers are now emerging at a high rate. Indeed, a recent study of citation-based impact metrics places XRISM third among active telescopes, trailing only the Einstein Probe and JWST (see <https://arxiv.org/pdf/2602.12303>). The strong impact of XRISM - despite the status of the gate valve - signals that it is an unique and highly valued telescope that taps a discovery space.

Key Projects

The XUG conducted an internal poll and then held a discussion to examine potential directions for a Key Projects segment in future proposal rounds. The key conclusions of this process are as follows:

- The XUG broadly supports the idea of a Key Projects category, but the success of this category in optimizing mission science hinges on its structure and implementation.
- We prefer a two- or three-tier system with different exposure boundaries, loosely following the scheme adopted by Chandra. For instance, a “large projects” category might extend between 300-600 ks, whereas a “very large projects” category might extend between 0.6-1.2 Ms (these are examples, not recommended boundaries). We believe that this scheme will best serve different target categories, best accelerate progress, and ensure the approval of a number of proposals across target categories. Potentially, the sizes of the proposal categories could depend on the target category. There may be value in retaining a target category framing for the key projects, rather than a topical framing.

- We see value in retaining proprietary rights for large projects, but suggest that data may need to be immediately public for very large projects and/or programs that stretch across multiple cycles.
- The XUG also sees tremendous potential in explicit partnerships with other missions, such as Hubble, JWST, and others. We would like to encourage the mission to pursue these agreements. The opportunity to pair XRISM with Hubble for UV spectroscopy (for instance), is a special one that will not last forever, and large programs may be able to take excellent advantage of this. There are notable synergies with JWST for clusters.
- The XUG understands that the review of Key Projects may be especially complicated. However, we want to encourage the mission to uphold the principles of dual-anonymous review to the greatest extent possible. Questions from a review panel to a proposal team could still be handled anonymously. If an in-person presentation is required (perhaps by Zoom), the XUG insists that the review panel must not include anyone who has proposed for a Key Project as PI or Co-I, and that such persons must also be barred from the presentation room (during the presentation and during any question period, or the equivalent if the meeting is by Zoom), and that ordinary restrictions on institutional conflicts (and close colleagues, etc.) must be enforced (again, conflicted persons must leave the room).