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While the goal of PUNCH is to unify the corona and heliosphere, a goal of the Multi-slit Solar Explorer (MUSE) is to refine our understanding of the coronal boundary. Scheduled to launch in 2027, MUSE will utilize a 35-slit spectrograph capable of observationally "freezing" solar flares and coronal mass ejections in time and space -- a feat unattainable even with the best single-slit spectrograph. MUSE will capture the spectra of four extreme ultraviolet lines centered around 171 Å, 284 Å, and 108 Å, while its context imager will capture images in the 195 Å and 304 Å passbands. These passbands probe the dynamic transition region and hot corona, weaving together a multi-layer narrative that can deepen our understanding of the mechanisms that drive, heat, and energize the solar corona. The deeper our understanding of the corona, the better our understanding of how coronal physics informs heliospheric physics. Together, MUSE and PUNCH are designed to approach complementary aspects of a similar problem from their respective angles, paving the way for big-picture collaborations.

The collaborations between these missions extend beyond their scientific objectives and deliverables. The PUNCH Outreach team has officially partnered with the MUSE Outreach team in an advisory capacity, focusing on content creation, pedagogy, and mentorship. Dr. Cherilynn Morrow (PUNCH Outreach lead) now serves on the advisory board of Dr. Rebecca Robinson (MUSE Outreach lead), further strengthening the link between PUNCH and MUSE by enhancing our joint outreach efforts. MUSE has partnered with the California Academy of Sciences, Chabot Space and Science Center, and the Boys & Girls Club of the Peninsula in order to serve the Bay Area with outreach content. In addition, some MUSE outreach products and plans are directly inspired by the PUNCH Outreach team, and the MUSE outreach framework offers an open invitation for continued collaboration as PUNCH observes its first light and MUSE continues its assembly.

As both PUNCH and MUSE work toward our shared goals, the MUSE community would like to thank the PUNCH community for their continued contributions to the MUSE outreach program, and introduce an opportunity for further collaboration. Your expertise, dedication, and insight have already been valuable assets to the MUSE outreach program, and we would gladly return the favor when the opportunity arises. This is just one example of the broader impact of your efforts, and I look forward to contributing and collaborating as we move forward.



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