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Thermal analysis and preliminary cooldown performance of the SCU cryostat

Wednesday 13 August 2025 16:00 (2 hours)

The SCU cryostat, featuring two 1.5-meter-long Nb-Ti superconducting undulators (SCUs), is currently being built for the Advanced Photon Source Upgrade. The final design, along with the thermal and mechanical models of this cryocooler-cooled, liquid helium-based cryostat, has been completed. The cryostat has been fabricated, and preliminary cool-down tests were conducted both with and without the two 1.5-meter-long Nb-Ti SCUs. This paper presents a comparison between the measured and calculated thermal performance of the cryostat.

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Yes

Would you like to submit this poster in student poster session on Sunday (August 10th)

No

Footnotes

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I have read and accept the Privacy Policy Statement

Yes

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