



X-RAY ASTRONOMY 2019

Current Challenges and New Frontiers in the Next Decade

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Future NASA X-ray Astronomy Missions and Concepts

Friday, 13 September 2019 11:00 (20 minutes)

This talk will summarize the status of and prospects for future NASA X-ray astronomy missions. Although there is only one NASA X-ray astronomy mission currently under development (the Imaging X-ray Polarimetry Explorer), there are several promising candidates for selection over the next 2-3 years through NASA's Small and mid-sized Explorer (SMEX and MIDEX) solicitations, including Arcus and Survey and the Time-domain Astrophysical Research eXplorer (STAR-X). More importantly, a number of studies of "probe-class" (~\$1B) and strategic X-ray mission studies have been conducted over the past 3-4 years in anticipation of the 2020 Decadal Survey of Astronomy and Astrophysics. Among these are the strategic Lynx concept and the probe class AXIS, STROBE-X, TAP, IPP, and HEX-P. Also, a major component of NASA's X-ray astronomy strategy remains participation in major non-US missions, such as JAXA's XRISM and ESA's Athena. Each of the NASA-led missions and NASA roles in non-US missions, and the science enabled by them, will be briefly described.

Topic

Future missions

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