

Physics & Astronomy Colloquium

Presents



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Hans Moritz Guenther

Research Scientist

MIT – Kavli Institute for Astrophysics &
Space Research

Thursday, February 8, 2024
12:10 pm, Webster Room 11

This will be a remote talk.

“25 years of Chandra”

Chandra is one of NASA's "great observatories" and was launched into space 25 years ago. To this day, it provides us with the sharpest X-ray images ever taken from the cosmos. Chandra has provided crucial observations in almost all areas of astrophysics from planets in our solar systems and the formation of stars to massive black holes and galaxy clusters.

I will describe some of the feats of engineering that made Chandra possible, show how Chandra's mirrors, instruments, and detectors work and then step through the most stunning images and discoveries of the last 25 years. I will explain how X-ray imaging and spectroscopy works and what information we can gather from those observations; often in tandem with other facilities like the Hubble space Telescope. This will give an introduction to the science of young stars and dying stars, black holes, jets, and clusters of galaxies. I will also discuss the challenges of operating an aging observatory and take a look into the future to see what's next for Chandra and what other missions might be on the horizon for X-ray astronomy in the future.

Host: Dr. Guy Worthey

ZOOM Information: Meeting ID: 965 8240 9398 • Passcode: physastro