THE CHANDRA/CIAO WORKSHOP AT UMASS LOWELL

A Journey Into X-ray Astronomy and Data Science





CIAO

University of Massachusetts Lowell May 19 – 23, 2025

Join experts from the Chandra X-ray Center and UMass Lowell for an engaging, hands-on workshop exploring the Chandra X-ray Observatory, X-ray astronomy, and data analysis. This week-long event features science talks, presentations, and practical sessions using real X-ray data—designed for undergraduate and graduate students, as well as early-career scientists in astronomy, physics, and other STEM fields.



WORKSHOP HIGHLIGHTS

Introduction to Chandra and CIAO Spectral Analysis

Low-resolution CCD spectra

High-resolution grating spectra

Spatial Analysis

Source detection

Extended sources

Modeling and Fitting with Sherpa CIAO in Python Using SAOImageDS9 The Chandra Source Catalog Topics in Al/ML for Astrophysics



Registration is FREE Register by April 25, 2025.

The workshop is limited to 30 participants, with priority given to UMass Lowell students. Selected participants will be notified by **April 30, 2025.**

Click here to register

LOCATION, ACCOMMODATIONS, TRAVEL

The workshop will take place at the University of Massachusetts in the historic city of Lowell.

For more details, visit the <u>workshop website</u> Email inquiries to <u>cxchelp@cfa.harvard.edu</u> All students are expected to attend in person and will be accommodated in the university dormitory.

Final arrangements are in progress, but we anticipate that accommodations and meals will be provided at little to no cost for all participants. Further details will be available on the workshop website.

Limited travel funding may be available.

This workshop is made possible by a generous donation from the Heising-Simons Foundation and from contributions by the Center for Astrophysics. The Chandra X-Ray Center is operated for NASA by the Smithsonian Astrophysical Observatory.



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