Tues, Aug 1

Opening Remarks

*Pat Slane*
Director, Chandra X-ray Center

9:00 AM

Supernovae and Their Remnants

Seeing Between the Lines: Insights into Supernova Remnants with High-resolution X-ray Spectroscopy

*Matthew Millard*
University of Iowa

9:10 AM

Chandra High-resolution X-Ray Spectroscopy of SN 1996cr, and Analysis of the Line Profiles

*Vikram Dwarkadas*
University of Chicago

9:40 AM

An Evolutionary Optimization Approach towards Unraveling High-Resolution X-ray Imaging and Spectroscopic Studies of Supernova Remnants

*Austin MacMaster*
University of Manitoba

9:55 AM

Mineralogy of interstellar dust in the X-ray regime

*Ioanna Psaradaki*
University of Michigan

9:58 AM
Foods and beverages—including coffee and tea—will be available in the Marlar Lounge. Food and drink are not permitted in the lecture hall.

Lab Astronomy, Methods, & Techniques

Laboratory astrophysics for high-resolution X-ray spectroscopy

Natalie Hell
Lawrence Livermore National Laboratory

New Measurement Resolves Key Astrophysical Fe XVII Problem

Chintan Shah
NASA Goddard Space Flight Center

X-ray Reflection Modeling in the Era of High-Resolution Spectroscopy

Javier Garcia
NASA Goddard Space Flight Center

Systematic uncertainties of atomic data in photoionization modeling

Ralf Ballhausen
UMCP & NASA-GSFC

AtomDB: Updates for Plasma Models of Recombination and Charge Exchange Plasmas

Adam Foster
Center for Astrophysics | Harvard & Smithsonian

A New Paradigm in X-ray Spectral Fitting

Carter Rhea
Université de Montréal

Sandwiches and other lunch foods, as well as drinks, will be served in Marlar Lounge, but you are welcome to explore the area for other food, as well.
High-resolution X-ray spectroscopy: a fundamental tool to study magnetic phenomena in the atmospheres of cool stars

Costanza Argiroffi
Università degli Studi di Palermo

Modeling the X-ray Line Profile Shapes from Massive Star Winds
Richard Ignace
East Tennessee State University

The Nature of X-rays from Young Stellar Objects in the Orion Nebula Cluster - A Chandra HETG Legacy Project
David Principe
MIT

Studying the symbiotic star CH Cyg with XMM-Newton and Chandra
Jesús A. Toalá
IRyA - UNAM

Challenges in Analyzing High-Res Spectra of Weak Sources
Vinay Kashyap
Center for Astrophysics | Harvard & Smithsonian

Advancing X-ray Background Modeling for Enhanced Data Analysis
Taweewat Somboonpanyakul
Stanford University

Perspectives on High Resolution X-Ray Spectroscopy
Claude Canizares
HETG Principal Investigator

Further food and beverages will be available in the Marlar Lounge. Food and drink are not permitted in the lecture hall.
Stars II

High-resolution X-ray spectroscopy of massive hot stars

Lida Oskinova
Universität Potsdam

Satellite Lines: A Probe for the Plasma Conditions in Hot-Star Wind Shocks

Sean Gunderson
University of Iowa

Magnetically Confined Wind Shocks on the Magnetic Massive Star theta^1 Orionis C

Marc Gagne
West Chester University

Survey of X-rays from Massive Stars Observed at High Spectral Resolution with Chandra

Joy Nichols
Center for Astrophysics | Harvard & Smithsonian

X-ray spectral diagnostics of O star wind mass-loss rates

David Cohen
Swarthmore College

4:30 PM

5:00 PM

5:15 PM

5:30 PM

5:45 PM

There are no formally organized activities or dinners after 6:00 PM
# Wed, Aug 2

## Diffuse Gases & Emission

### 9:00 AM

**High-Resolution X-ray Spectroscopy of Galaxy Clusters, Groups, and Massive Galaxies**

*Irina Zhuravleva*

*University of Chicago*

Observation of warm-hot intergalactic medium in OVII and OVIII absorption against diffuse extended sources with Athena and LEM

*Lydia Stofanova*

*SRON, Leiden University*

Spiral-like Features in Galaxy Clusters Driven by AGN Jet Feedback

*Majidul Rahaman*

*Institute of Astronomy, National Tsing Hua University, Taiwan*

Galaxy cluster cosmology with XRISM

*Eric Miller*

*MIT*

Cavity Detection Tool

*Tomáš Plšek*

*Masaryk University*

Robust detection of diffuse X-ray inverse-Compton emission in a galaxy group

*François Mernier*

*NASA GSFC / University of Maryland College Park*

Measuring Outflows and Rotation in the Hot Circumgalactic Medium of Nearby Simulated Disc Galaxies with High-Resolution X-ray Spectroscopy

*John ZuHone*

*Center for Astrophysics | Harvard & Smithsonian*

Hidden Cooling Flows in Clusters and Groups of Galaxies

*Andy Fabian*

*Institute of Astronomy, University of Cambridge, UK*

### 9:30 AM

### 9:45 AM

### 9:48 AM

### 9:51 AM

### 9:54 AM

### 9:57 AM

### 10:12 AM

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## Morning Break

**10:27 AM**

*Foods and beverages—including coffee and tea—will be available in the Marlar Lounge. Food and drink are not permitted in the lecture hall.*
## Diffuse Gases & Absorption

Hot Milky Way halo seen in 1 Ms Chandra HETG observation of NGC 4051 over eight years: the power of self-consistent, Bayesian framework

- **Anna Ogorzalek**  
  NASA GSFC/UMD

  Constraining the chemistry, turbulence, and more in the multi-phase "hot" circumgalactic medium

- **Sanskriti Das**  
  KIPAC, Stanford University

  High resolution X-ray spectroscopy: A Tool to Unveil the Super-Virial Hot Component of the Milky Way Circumgalactic Medium

- **Armando José Lara Díaz Infante**  
  Instituto de Astronomía - UNAM

  Detection of the Galaxy's Missing Baryons in the CGM of three L* Galaxies

- **Fabrizio Nicastro**  
  INAF - OAR

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## Active Galactic Nuclei I

High-resolution spectroscopy of AGN – part I

- **Matteo Guainazzi**  
  ESA

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<tr>
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<td>Matteo Guainazzi</td>
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## Lunch Break

Sandwiches and other lunch foods, as well as drinks, will be served in Marlar Lounge, but you are welcome to explore the area for other food, as well.

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<td>Lunch Break</td>
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Active Galactic Nuclei II

Probing multi-phase AGN outflows with high-resolution spectroscopy

Missagh Mehdipour  
STScI
Detection of Ultra-Fast Outflows in the Narrow-Line Seyfert 1 Galaxy Mrk 110.

Omar Isaac Segura Montero  
Instituto de Astronomía, Ciudad Universitaria, UNAM
Ultra-fast outflow responses in highly accreting supermassive black holes

Yerong Xu  
INAF-IASF Palermo
Exploring Centaurus A’s Enigmatic Giant Radio Lobes: Preliminary Findings from Chandra Pointings

Karthik Balasubramaniam  
Institute of Astronomy, National TsingHua University, Taiwan
X-ray Spectral study of MKN 421 using Astrosat observation

Jyotishree Hota  
National Institute of Technology, Rourkela, Odisha, India
AGN STORM 2: Photoionized emission and absorption features in the high-resolution X-ray spectra of Mrk 817

Fatima Zaidouni  
MIT
Exploring the circumnuclear environment of SMBHs using ray-tracing simulations in the X-ray band

Georgios Dimopoulos  
Universidad Diego Portales
TEPID: Time Evolving Photoionisation with Current and Future X-ray Telescopes

Alfredo Luminari  
INAF - IAPS
X-ray spectroscopic diagnostics of stellar and AGN feedback in the interstellar medium

Q. Daniel Wang  
University of Massachusetts
Further food and beverages will be available in the Marlar Lounge. Food and drink are not permitted in the lecture hall.

The Legacy Of Chandra

With Chandra coming up on its 25th anniversary, a portion of this conference is being set aside to discuss the legacy of the mission. Participants will break off into groups to discuss what is needed—both in terms of new data that could be taken as well as in broader actions—to take advantage of and maximize the impact of Chandra’s high resolution spectroscopic capabilities. Remote participants are encouraged to fully participate, and we will summarize the discussions at the start of the third day.

There are no formally organized activities or dinners after 6:00 PM
# Thurs, Aug 3

## Summary of the Future of Chandra Discussions
9:00 AM

## Compact Objects & Novae

### Novae and Super-Soft Sources in High-Resolution X-ray Spectroscopy
9:15 AM

**Jan-Uwe Ness**  
*ESA/ESAC*

- The Legacy of the high resolution spectra of novae

**Marina Orio**  
*University of Wisconsin and INAF-Padova*

- High Resolution Spectra of the Galactic Binary Pulsar 4U 1907+09

**Jun Yang**  
*MIT*

- The Galactic Ridge X-ray Problem is not Solved

**Antonio Rodriguez**  
*Caltech*

- Disc winds during the faint outburst of an accreting millisecond X-ray pulsar

### Morning Break
10:27 AM

*Foods and beverages—including coffee and tea—will be available in the Marlar Lounge. Food and drink are not permitted in the lecture hall.*

## Science Organizing Committee

- Hans Moritz Günther  
- Aya Bamba  
- Ehud Behar  
- Lia Corrales  
- Anna Lia Longinotti  
- David P Huenemoerder  
- Delphine Porquet  
- Daniele Rogantini  
- Aurora Simionescu  
- Jose Torrejon
# Compact Objects: Binaries

High-resolution spectroscopy from X-ray binaries and compact objects

- **María Díaz Trigo**  
  *ESO*  
  The Hot Inner Disk Environment and Torque Reversals in 4U 1626-67
  
- **Norbert S. Schulz**  
  *MIT*  
  A comprehensive study of Compton shoulder in High Mass X-ray binaries with gratings onboard Chandra
  
- **Pragati Pradhan**  
  *Embry Riddle Aeronautical University*  
  High Resolution Spectra of X-ray Binaries in M 31
  
- **Herman Marshall**  
  *MIT Kavli Institute*  
  In Quest of X-ray Transients in NGC 4552 using Chandra Telescope
  
- **Sreya A S**  
  *Christ Deemed to be University*  
  X-ray Reflection Spectroscopy of the Transient Black Hole Candidate MAXI J1803-298
  
- **Shina Adegoke**  
  *Caltech*  
  Broadband spectroscopy of 4U 1543-47 in high/soft state
  
- **Nazma Husain**  
  *Jamia Millia Islamia University*  
  Understanding the environment of Cen X-3 with RGS
  
- **Jose Joaquin Rodes-Roca**  
  *University of Alicante*

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**Lunch Break**  
*12:27 PM*

*Sandwiches and other lunch foods, as well as drinks, will be served in Marlar Lounge, but you are welcome to explore the area for other food, as well.*
Compact Objects: Winds

Element abundance measurement and absorption measure distribution for the stellar black hole GRO J1655-40

Noa Keshet
Technion

Accretion disk winds in X-ray binaries

Peter Kosec
MIT

The current state of disk wind observations in BHLMXBs through X-ray absorption lines in the iron band

Maxime Parra
Université Grenoble Alpes/ Università Roma Tre

Non-Equatorial Massive BH XRB UFOs: Indispensable Component for High-Density Disks

Keigo Fukumura
James Madison University

Afternoon Break

Further food and beverages will be available in the Marlar Lounge. Food and drink are not permitted in the lecture hall.

Local Organizing Committee

Chair: Thomas Connor

Joanne Baldini
Jason Conry
Katie Cranmer
Tara Gokas

Hans Moritz Günther
David P Huenemoerder
Daniele Rogantini
Evan Tingle
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<tr>
<td>XRISM</td>
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<td>NASA Goddard Space Flight Center</td>
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<td>New Athena</td>
<td>Matteo Guainazzi</td>
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<td>HUBS</td>
<td>Junjie Mao</td>
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**Panel Discussion**  
5:00 PM

**Concluding Remarks**  
5:45 PM

The meeting formally concludes at 6:00 PM. Please join us in December 2024 for the 25 Years of Chandra Symposium!