Remote
In Person
Solicited
Invited
Contributed
Flash

HIGH RESOLUTION X-RAY SPECTROSCOPY

A CHANDRA WORKSHOP

Tues, Aug 1

All Times EDT (UTC-4)

Opening Remarks — 9:00 AM

Pat Slane
Director, Chandra X-ray Center

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

Morning Break — 10:13 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
10:45 AM

New Measurement Resolves Key Astrophysical Fe XVII Problem

Chintan Shah
NASA Goddard Space Flight Center
11:15 AM

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

Javier Garcia
NASA Goddard Space Flight Center
11:30 AM

Systematic uncertainties of atomic data in photoionization modeling

Ralf Ballhausen
UMCP & NASA-GSFC
11:45 AM

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

Adam Foster
Center for Astrophysics | Harvard & Smithsonian
12:00 PM

A New Paradigm in X-ray Spectral Fitting

Carter Rhea
Université de Montréal
12:15 PM

Lunch Break — 12:30 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.

Stars I

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

2:00 PM

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

2:30 PM

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

2:45 PM

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

2:48 PM

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

3:03 PM

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

3:18 PM

Perspectives on High Resolution X-Ray Spectroscopy

3:33 PM

Claude Canizares
HETG Principal Investigator

Afternoon Break

3:53 PM

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

4:30 PM

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

Sean Gunderson
University of Iowa

5:00 PM

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

Marc Gagne
West Chester University

5:15 PM

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

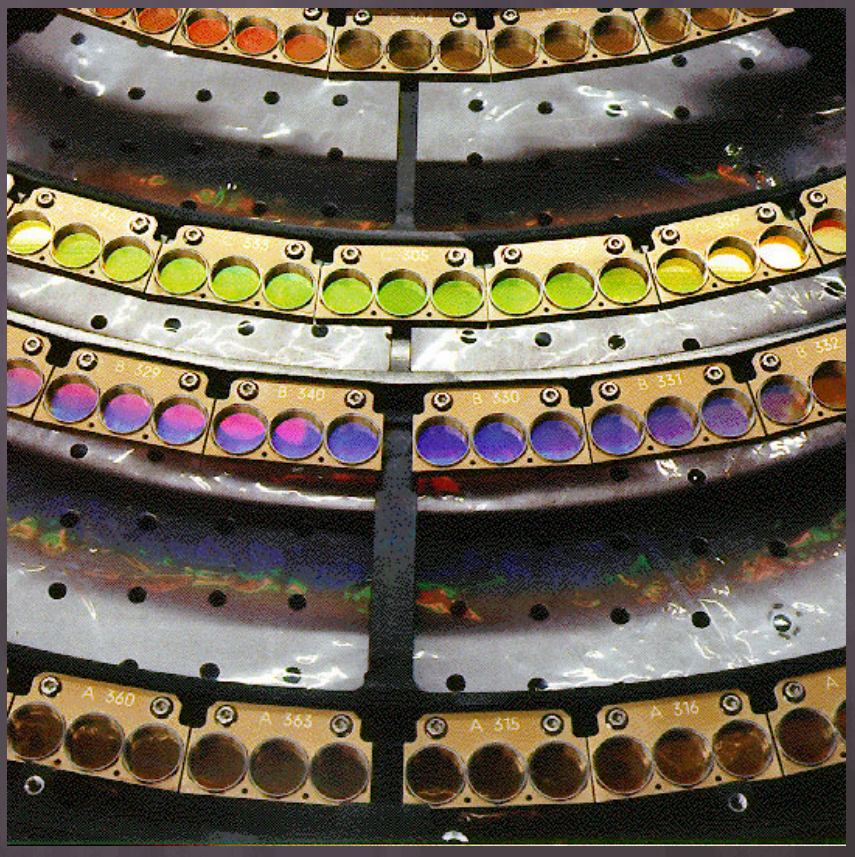
Joy Nichols
Center for Astrophysics | Harvard & Smithsonian

5:30 PM

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

David Cohen
Swarthmore College

5:45 PM



There are no formally organized activities or dinners after 6:00 PM

Wed, Aug 2

All Times EDT (UTC-4)

Diffuse Gases & Emission

High-Resolution X-ray Spectroscopy of Galaxy Clusters, Groups, and Massive Galaxies — 9:00 AM

Irina Zhuravleva
University of Chicago

Observation of warm-hot intergalactic medium in OVII and OVIII absorption against diffuse extended sources with Athena and LEM — 9:30 AM

Lydia Stofanova
SRON, Leiden University

Spiral-like Features in Galaxy Clusters Driven by AGN Jet Feedback — 9:45 AM

Majidul Rahaman
Institute of Astronomy, National Tsing Hua University, Taiwan

Galaxy cluster cosmology with XRISM — 9:48 AM

Eric Miller
MIT

Cavity Detection Tool — 9:51 AM

Tomáš Plšek
Masaryk University

Robust detection of diffuse X-ray inverse-Compton emission in a galaxy group — 9:54 AM

Francois 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 — 9:57 AM

John ZuHone
Center for Astrophysics | Harvard & Smithsonian

Hidden Cooling Flows in Clusters and Groups of Galaxies — 10:12 AM

Andy Fabian
Institute of Astronomy, University of Cambridge, UK

Morning Break — 10:27 AM

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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 Ogorzałek
NASA GSFC/UMD

11:00 AM

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

Sanskriti Das
KIPAC, Stanford University

11:15 AM

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

Armando José Lara Díaz Infante
Instituto de Astronomía - UNAM

11:30 AM

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

Fabrizio Nicastro
INAF - OAR

11:45 AM

Active Galactic Nuclei I

High-resolution spectroscopy of AGN – part I

Matteo Guainazzi
ESA

12:00 PM

Lunch Break

12:30 PM

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Active Galactic Nuclei II

Probing multi-phase AGN outflows with high-resolution spectroscopy

Missagh Mehdipour
STScI

2:00 PM

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

Omar Isaac Segura Montero
Instituto de Astronomía, Ciudad Universitaria, UNAM

2:30 PM

Ultra-fast outflow responses in highly accreting supermassive black holes

Yerong Xu
INAF-IASF Palermo

2:45 PM

Exploring Centaurus A's Enigmatic Giant Radio Lobes: Preliminary Findings from Chandra Pointings

Karthik Balasubramaniam
Institute of Astronomy, National TsingHua University, Taiwan

3:00 PM

X-ray Spectral study of MKN 421 using Astrosat observation

Jyotishree Hota
National Institute of Technology, Rourkela, Odisha, India

3:03 PM

AGN STORM 2: Photoionized emission and absorption features in the high-resolution X-ray spectra of Mrk 817

Fatima Zaidouni
MIT

3:06 PM

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

Georgios Dimopoulos
Universidad Diego Portales

3:09 PM

TEPID: Time Evolving Photoionisation with Current and Future X-ray Telescopes

Alfredo Luminari
INAF - IAPS

3:24 PM

X-ray spectroscopic diagnostics of stellar and AGN feedback in the interstellar medium

Q. Daniel Wang
University of Massachusetts

3:39 PM

Afternoon Break 3:54 PM

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 4:30 PM

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

All Times EDT (UTC-4)

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 — 9:45 AM

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

Jun Yang
MIT — 10:00 AM

The Galactic Ridge X-ray Problem is not Solved

Antonio Rodriguez
Caltech — 10:15 AM

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

Alessio Marino
Institute of Space Sciences (ICE-CSIC) — 10:18 AM

Morning Break — 10:27 AM

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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

11:00 AM

The Hot Inner Disk Environment and Torque Reversals in 4U 1626-67
Norbert S. Schulz
MIT

11:30 PM

A comprehensive study of Compton shoulder in High Mass X-ray binaries with gratings onboard Chandra
Pragati Pradhan
Embry Riddle Aeronautical University

11:45 PM

High Resolution Spectra of X-ray Binaries in M 31
Herman Marshall
MIT Kavli Institute

12:00 PM

In Quest of Xray Transients in NGC 4552 using Chandra Telescope
Sreya A S
Christ Deemed to be University

12:03 PM

X-ray Reflection Spectroscopy of the Transient Black Hole Candidate MAXI J1803-298
Shina Adegoke
Caltech

12:06 PM

Broadband spectroscopy of 4U 1543-47 in high/soft state
Nazma Husain
Jamia Millia Islamia University

12:09 PM

Understanding the environment of Cen X-3 with RGS
Jose Joaquin Rodes-Roca
University of Alicante

12:12 PM

Lunch Break

12:27 PM

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Compact Objects: Winds

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

Noa Keshet
Technion

2:00 PM

Accretion disk winds in X-ray binaries

Peter Kosec
MIT

2:15 PM

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

2:45 PM

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

Keigo Fukumura
James Madison University

3:00PM

Afternoon Break

3:15 PM

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Local Organizing Committee

Chair: Thomas Connor

Joanne Baldini
Jason Conry
Katie Cranmer
Tara Gokas
Hans Moritz Günther
David P Huenemoerder
Daniele Rogantini
Evan Tingle

Future Missions

XRISM

Brian Williams
NASA Goddard Space Flight Center

4:00 PM

New Athena

Matteo Guainazzi
ESA

4:12 PM

LEM

Ralph Kraft
Smithsonian Astrophysical Observatory

4:24 PM

Arcus

Randall Smith
Smithsonian Astrophysical Observatory

4:36 PM

HUBS

Junjie Mao
Tsinghua University

4:48 PM

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!