

Physics of the Cosmos



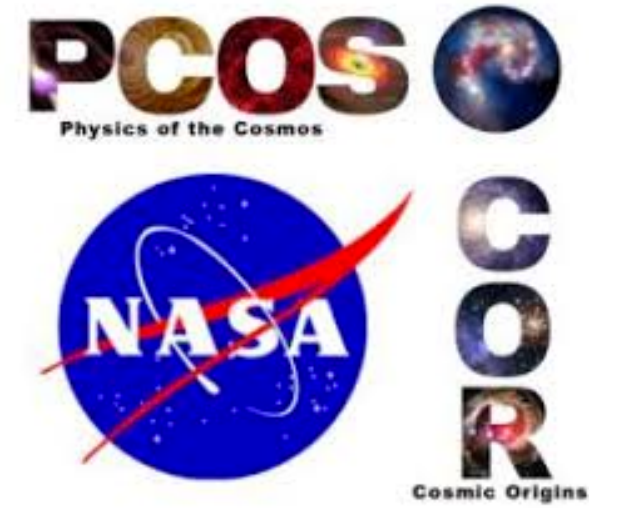
X-ray Science Interest Group

John Tomsick
UC Berkeley/SSL

Ryan Hickox
Dartmouth College

AAS HEAD Meeting
19 March 2019

Schedule for this session



Intro to XRSIG

US involvement in *Athena* - Mike Garcia (NASA HQ)



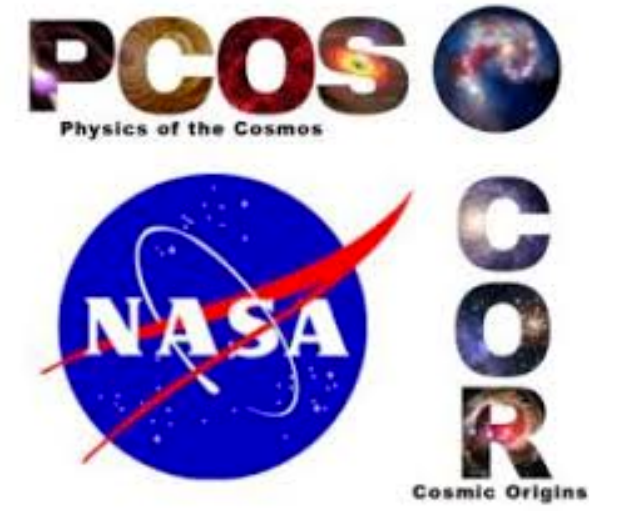
Programmatic update for *Lynx* — Doug Swartz (MSFC)



Overview of White Papers submitted to the Decadal Survey, in the context of XRSIG goals — Ryan Hickox (Dartmouth)

Discussion

Intro to XRSIG



X-ray Science Interest Group

The goal of the X-ray Science Analysis Group (XRSIG) is to provide quantitative metrics and assessments to NASA in regard to future X-ray observatories. Specifically, the XRSIG will

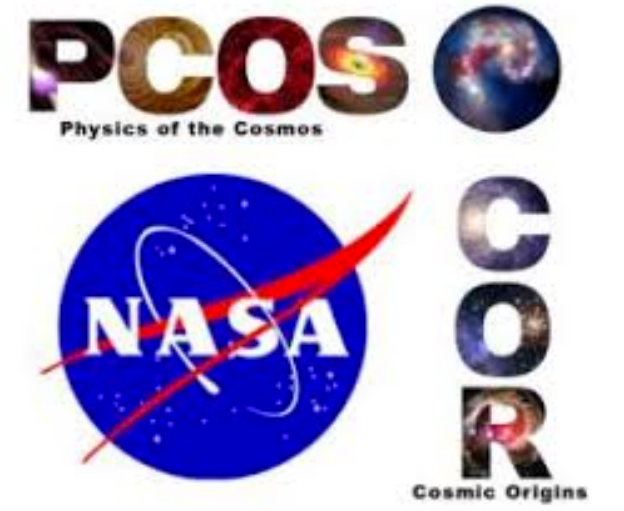
- Track and analyze evolving science goals and requirements in X-ray astronomy, especially as current "hot" topics evolve.
- Provide an active communication forum for X-ray astrophysics (e.g., via town hall meetings at venues such as AAS and APS meetings).
- Support mission studies and concept development for future X-ray observatories.
- Analyze technology development and prioritization plans with respect to redefined science goals and the evolution of mission concepts (i.e., the XRSIG will aid the PhysPAG in analyzing technology needs).

The XRSIG is open to all members of the community.

If you are interested in contributing to the work of the XRSIG, please subscribe using the link below. For other inquiries, e-mail co-chairs John Tomsick

at jtomsick@ssl.berkeley.edu and Ryan Hickox at ryan.c.hickox@dartmouth.edu

Overview of White Papers submitted Astro2020

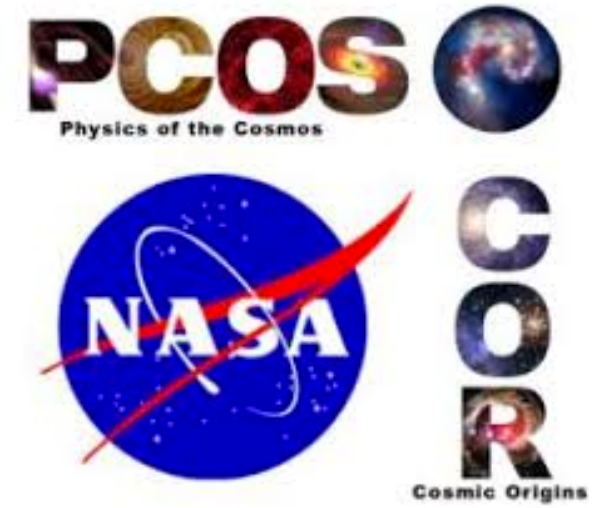


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- Provide an **active communication forum** for X-ray astrophysics (e.g., via town hall meetings at venues such as **AAS** and APS meetings).
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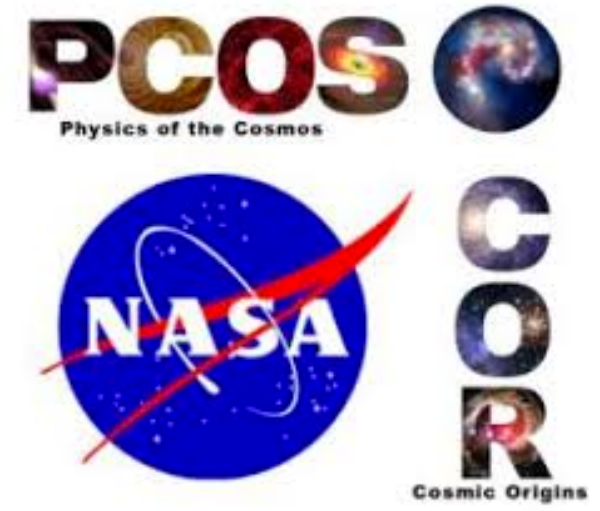


AGN / SMBHs	Eric	Perlman	Relativistic Jets in the Accretion & Collimation Zone : New Challenges Enabled by New Instruments
AGN / SMBHs	Dheeraj	Pasham	Probing the Cosmological Evolution of Super-massive Black Holes using Tidal Disruption Flares
AGN / SMBHs	Elena	Gallo	Towards a high accuracy measurement of the local black hole occupation fraction in low mass galaxies
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AGN / SMBHs	Michael	Koss	Black Hole Growth in Mergers and Dual AGN
AGN / SMBHs	Susanne	Aalto	Extremely obscured galaxy nuclei ,Äi hidden AGNs and extreme starbursts
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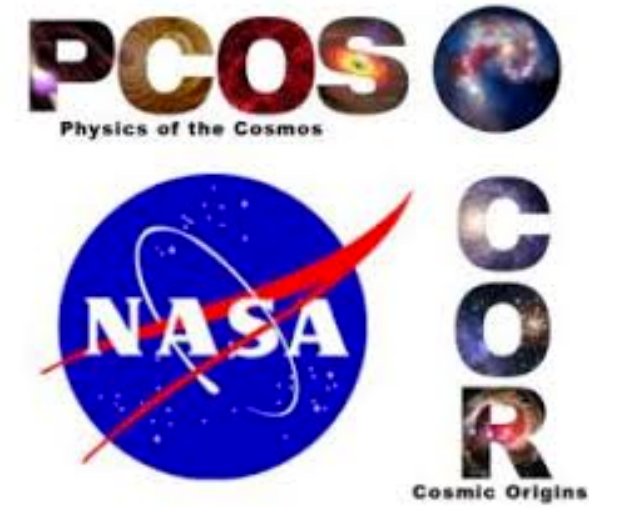


Galaxies, CGM, Groups, Clusters



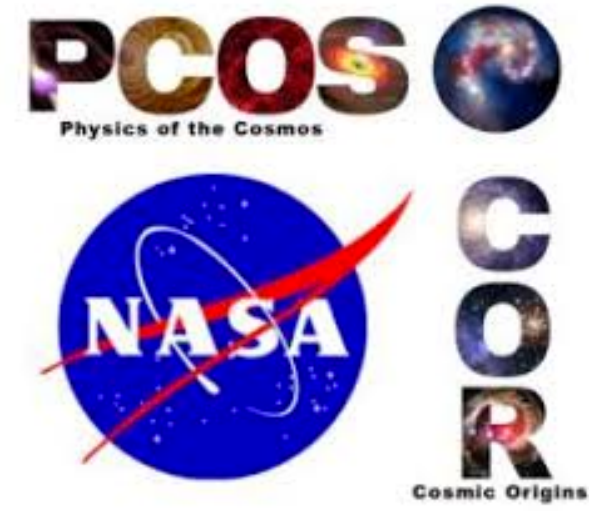
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Star Formation, ISM, Exoplanets



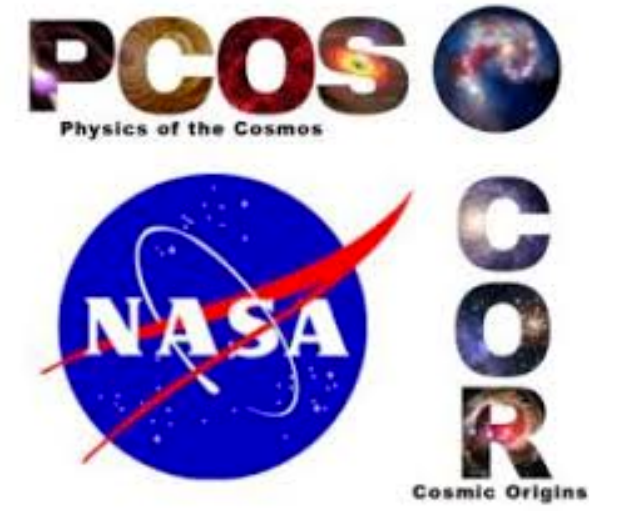
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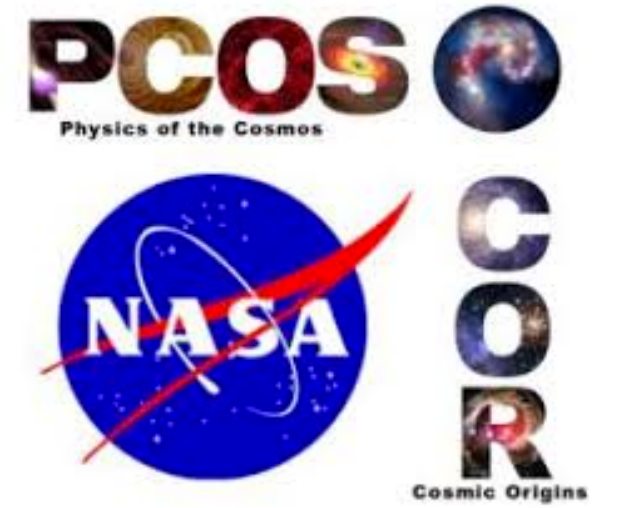
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Discussion Questions



- Where do we see as the most exciting **synergies** between X-ray astronomy and other areas of astrophysics and cosmology?

e.g., GW/multi-messenger

Multiwavelength surveys

Coordinated campaigns on transients

- Are there particularly timely **new science opportunities** for X-ray astronomy?