

IAU I-HOW & COSPAR Capacity Building Workshop on X-Ray Astronomy

X-VISION  
2023

# X-Ray vision of the energetic universe

A joint Workshop for X-Ray Data analysis

XMM-Newton, NICER, and NuSTAR

6th - 17th February, 2023

North-West University (NWU)  
Potchefstroom, South Africa

## Topics

- + Black holes
- + Pulsars
- + Jets
- + Galaxy clusters
- + Ionized outflows

## Key Lecturers and Project Leaders

- Dr. Keith Arnaud, NASA, GSFC, USA  
Dr. Diego Altamirano, Univ. of Southampton, UK  
Prof. Markus Boettcher, NWU, SA  
Dr. Ignacio de la Calle, ESA/ESAC, Spain  
Prof. Gulab C. Dewangan, IUCAA, India  
Dr. Carlos Gabriel, COSPAR, Germany  
Dr. Matteo Guainazzi, ESA, The Netherlands  
Mr. Aitor Ibarra, ESA/ESAC, Spain  
Dr. Kristin K. Madsen, CalTech, USA  
Dr. Craig Markwardt, GSFC, USA  
Prof. Mariano Mendez, Univ. of Groningen  
Dr. Dan Wilkins, KIPC, Standford, USA  
Dr. James Stiener, Harvard-Smithsonian, USA  
Dr. Randall Smith, Harvard-Smithsonian, USA

## Organizing committee

- Prof. Markus Boettcher  
Dr. Sunil Chandra  
Prof. James Chibueze  
Dr. Carlos Gabriel  
Dr. Pranjupriya Goswami  
Dr. Matteo Guainazzi  
Prof. Mariano Mendez  
Prof. Christo C Venter

Register at:  
<https://xvisionastro2023.github.io>

For further information please write to:  
[xrayvision2023@gmail.com](mailto:xrayvision2023@gmail.com)

