

Randall Smith

Candidate for At-Large Trustee

Affiliation: Center for Astrophysics | Harvard & Smithsonian

Position/Title: Associate Director - Science

PhD institution: University of Wisconsin – Madison, 1996

Areas of scientific interest:

High energy astrophysics, Atomic physics/spectroscopy, Interstellar Medium, Space-based instrumentation and mission development



AAS and/or Division leadership positions and dates:

- Chair Line (Vice/Chair/Past), High Energy Astrophysics Division (HEAD), American Astronomical Society, 2020 – 2025
- Chair Line (Vice/Chair/Past), Laboratory Astrophysics Division (LAD), American Astronomical Society, 2015 – 2021
- Secretary, High Energy Astrophysics Division (HEAD), American Astronomical Society, 2012 – 2015

Other relevant positions, experience, and dates:

- President, IAU Commission B5 Laboratory Astrophysics, 2024 – present
- Recipient, Laboratory Astrophysics Division Career Prize, 2024
- Member, Event Horizon Telescope Board, 2023 – present
- Member, COSPAR Panel on Capacity-Building Workshops, 2019 – present
- Chair, COSPAR Panel on Capacity-Building Workshops Fellowship Program, 2010 – 2018
- Co-I, X-ray Imaging & Spectroscopy Mission (XRISM), 2017 – present
- US Representative, Athena Science Study Team, 2013 – 2022
- Member, Chandra Users' Committee, 2006 – 2008

Statement:

I am honored to be nominated for a position as a member at large of the AAS Board of Trustees. I've been a member of the AAS since graduate school and have served as Chair of both the HEAD and LAD divisions of the AAS as well as a term as HEAD Secretary. As a member of the executive team of the Center for Astrophysics, as well as being PI of the proposed Arcus X-ray Spectroscopy mission, I have substantial experience in leading and managing astronomical ventures. My time on the Chandra Users' Committee as well as nearly a decade

as the US representative to the Athena Science Study Team taught me how to listen to and represent the interests of astronomers with varied and sometimes conflicting interests.

My career has been spent largely in large government labs, but directly connected to academic astronomers. In particular, at the Center for Astrophysics, Harvard and Smithsonian astronomers work side-by-side, sharing facilities, students, and most importantly, advice. Although legally speaking the two organizations remain distinct, a visitor could not distinguish a Harvard office from a Smithsonian one. Although trained as a high-energy astronomer, my position as the Associate Director for all Science at CfA has broadened my experience. As a Trustee, I would strive to represent the interests of all astronomers, regardless of institution or status.

I am also a firm believer in the power of international connections to build a stronger astronomical community. This shows in my years of work with ESA and JAXA missions such as Athena, XRISM, and Suzaku. I have also been working with COSPAR's capacity-building workshop program for over 15 years. This program organizes two-week training schools, bringing together early career researchers from multinational areas and experts from around the world. Using freely-available satellite data and tools, the students learn new ways to do astronomy, heliophysics, or Earth observing – with followup opportunities for fellowships. I have helped the program grow from one course teaching X-ray astronomy to students from all over South America to a worldwide program that has taught the use of satellite data of all kinds to students and teachers who go on to train others, vastly expanding the involvement and reach of such facilities.

Astronomy in the US is changing faster than any other time in my professional career. Giant databases of new observations joined together with AI/ML tools hold the promise for great discoveries but their availability and the ethical rules for using these powerful tools remain in their infancy. Costs for conferences have continued to rise post-COVID, both in terms of direct outlay and future carbon costs, with the hope of practical hybrid or remote meetings proving challenging to implement. While open access for journals has become the norm rather than outlier, this has not eliminated the need for publication costs – which are becoming harder to raise as grant acceptance rates dip. The AAS has been and will continue to address these issues, and I hope to help with this effort.