

Angela Speck

Candidate for At-Large Trustee

Affiliation: University of Texas at San Antonio

Position/Title: Professor

PhD institution: University College London, 1998



Areas of scientific interest:

My scientific interests center on understanding the formation, composition, and evolution of cosmic dust around evolved stars, particularly asymptotic giant branch (AGB) stars. I study how dust grains condense, crystallize, and are processed in circumstellar environments, and how these processes drive stellar mass loss and contribute to the chemical enrichment of the interstellar medium. My work combines infrared observations, laboratory astrophysics, and radiative transfer modeling, with a strong emphasis on astromineralogy, including the role of alumina, silicates, silicon carbide, and carbonaceous materials. I am especially interested in non-equilibrium dust processes such as recalescence, electron-induced crystallization, and dust–gas interactions in bow shocks and planetary nebulae.

AAS and/or Division leadership positions and dates:

- Co-Chair, Total Solar Eclipse Task Force, American Astronomical Society, 2014 – present
- Member, Beatrice M. Tinsley Prize Selection Committee, American Astronomical Society, 2019 – 2022
- Member, Code of Ethics Committee, American Astronomical Society, 2017 – 2020
- Member, Committee on the Status of Women in Astronomy (CSWA), American Astronomical Society, 2017 – 2020
- Chair, Code of Ethics Committee, American Astronomical Society, 2018 – 2019
- Member, Task Force on Inclusion and Diversity in Graduate Astronomy Education, American Astronomical Society, 2017 – 2019
- Co-founder, FAMOUS Travel Grants, American Astronomical Society, 2013
- Councilor, AAS Council (now Board of Trustees), American Astronomical Society, 2011 – 2014

Other relevant positions, experience, and dates:

- Fellow, American Association for the Advancement of Science (AAAS), 2021 – present
- Member, Steering Group, AAAS Astronomy (Section D), 2023
- Member Representative to the Association of Universities for Research in Astronomy (AURA) for the University of Texas at San Antonio, 2019 – present

- Member, Astronomy and Astrophysics Advisory Committee (AAAC), 2013 – 2016
- Chair, NOAO Users Committee, 2009 – 2011; Member, 2004 - 2011

Statement:

I am running for Trustee-At-Large because I believe the AAS has a critical responsibility to advocate for astronomy and astronomers at a time of profound challenge for science, higher education, and public trust in expertise. The Society must continue to support its members not only through meetings, publications, and professional development, but also through visible, principled leadership that defends the value of science and the people who do it.

I am a professor of physics and astronomy at the University of Texas at San Antonio. From 2019 to 2025, I served six years as chair of the department, leading a unit within a minority-serving institution with a large population of first-generation and non-traditional students. My understanding of how institutional structures, funding priorities, and national policy decisions shape faculty careers, student success, and the long-term health of our discipline comes not only from departmental leadership, but from sustained engagement at the national level. I have served on the AAAS Astronomy Section D Steering Group, on the Astronomy and Astrophysics Advisory Committee (AAAC), a congressionally appointed FACA committee advising NSF, NASA, and the Department of Energy, and as UTSA's member representative to AURA, where I served on the Advisory Committee on Communication and Engagement. These roles have given me a broad perspective on how decisions made at the federal and organizational levels ultimately affect research opportunities, workforce development, and equity across the astronomical community.

I have been actively involved with the AAS in numerous capacities for more than 15 years and have seen firsthand how effective the Society can be when it brings together advocacy, community standards, and strategic action. As Trustee-At-Large, I would work to ensure that the AAS continues to advocate for astronomy in every available arena, including engagement with policymakers, federal agencies, and the public. In an era of shrinking or threatened support for science, it is essential that the AAS clearly and consistently articulates the value of astronomical research, education, and discovery, while also defending the professional wellbeing of its members.

Equity, inclusion, and justice must be central to that advocacy. The astronomy community includes people who are disproportionately affected by hostile policies, structural inequities, and exclusionary practices, particularly individuals from historically marginalized and currently targeted groups. The AAS has both the opportunity and the responsibility to use its voice, policies, and resources to support those members, improve professional climates, and promote ethical and inclusive practices across institutions. I see this not as separate from scientific excellence, but as fundamental to it.

My leadership experience spans research, teaching, administration, national service, and public engagement. I bring a collaborative, transparent leadership style and a strong commitment to ethics, inclusion, and accountability. As Trustee-At-Large, my goal would be to help the AAS remain a strong advocate for astronomy, a supportive professional home for its members, and a clear voice for science in society.