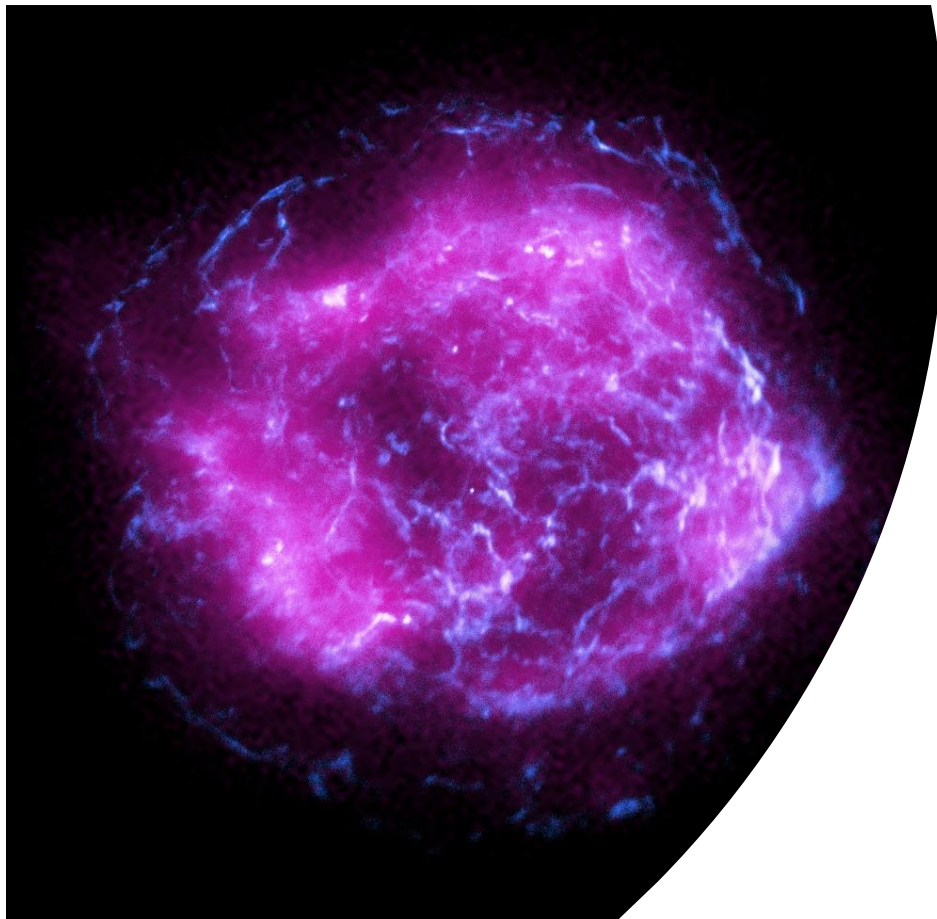


AIAA GHS Lecture on NASA's Imaging X-Ray Polarimetry Explorer (IXPE) Telescope with
Janice Houston

By Tracie Prater

AIAA Greater Huntsville Section hosted Janice Houston, the former lead systems engineer for IXPE, for our March professional talk. Launched in December 2021, IXPE's mission is to address fundamental scientific questions relating to black holes, magnetic fields, and pulsars. IXPE was a partnership between NASA (project office at NASA Marshall), the Italian Space Agency, Ball Aerospace, Nagoya University, and the Laboratory for Atmospheric and Space Physics. Following deployment and checkout, IXPE's first image of the supernova Cassiopeia A was published in February 2022. Researchers are using data from IXPE to create the first X-ray polarization maps of stellar objects.



About Janice Houston: Janice Houston joined the Center for Astrophysics next generation Event Horizon Telescope (CfA/ngEHT) systems engineering team in January 2022. She was

previously the lead system engineer for the Imaging X-ray Polarimetry Explorer (IXPE), a space-based observatory which successfully launched on December 9, 2021 and which is a collaboration between NASA Marshall Space Flight Center (MSFC) and the Italian Space Agency (ASI). Janice started her career working for Boeing Aerospace Operations supporting the Long Duration Exposure Facility (LDEF) closeout at Langley Research Center (LaRC). During Janice's 25+ years in spaceflight systems, she has developed technical expertise in microgravity, vibration and acoustic environments. Her projects have resulted in spaceflight hardware on sounding rockets, Space Shuttle, and International Space Station. Janice has worked on ALV-XI and Ares I-X launch vehicles, SWORDS and SLS development vehicles and ASMAT and SMAT subscale rocket test programs. She has conducted tests at various NASA centers (MSFC, LaRC, GRC, MAF, SSC, WFF, JSC, and KSC) plus domestic and internal clean room facilities/test sites including: Indian Head Naval Warfare Center, ATK Promontory Utah, EADS in Bremen, Germany and Alenia Aerospazio in Torino, Italy. Janice has flown on the "Vomit Comet", holds two patents for her experimental work with magnets in the microgravity environment, and has co-authored multiple papers. Janice has served on the University of Arizona Physics Department External Advisory Board and two National Research Council Transportation Research Board Airport Cooperative Research Program Panels.