

GARY P. ZANK – SHORT BIOGRAPHY

CURRENT POSITION: University of Alabama Board of Trustees *Trustee Professor* and *Aerojet/Rocketdyne Chair in Space Science*, Eminent Scholar and Distinguished Professor, -and- Director, Center for Space Physics and Aeronomic Research (CSPAR), University of Alabama at Huntsville –and- Chair, Department of Space Science, University of Alabama at Huntsville

EDUCATION: BSc, 1982; BSc.(Hons.) (1983); Ph.D. (1987) (all Univ. Natal, South Africa).
Post-doc: Max-Planck-Institut fuer Kernphysik and Max-Planck-Institut fuer Aeronomie (Germany) (1987-1989), Bartol Research Institute, University of Delaware (1989 – 1991)

RESEARCH SPECIALTIES: Space and solar physics, plasma physics, computational physics.

PREVIOUS POSITIONS: Pei-Ling Chan Chair of Physics –and- Chair of Physics Department, University of Alabama in Huntsville; Chancellor’s Professor of Physics and Astronomy, University of California, Riverside (UCR) -and- Director, UCR Institute of Geophysics and Planetary Physics (IGPP) (July 2001 – June 2008) -and- System-wide Director, IGPP (September 2005 – June 2008); Professor, Bartol Research Institute, University of Delaware (1991-2000).

AWARDS and FELLOWSHIPS

- *Member, US National Academy of Sciences* [elected 2016]
- *The Axford Medal*, highest honor awarded by the Asia, Oceania Geosciences Society (AOGS) [2015]. Citation: *For his seminal contributions to our understanding of evolution and properties of solar wind MHD turbulence, structures in the outer heliosphere, and particle acceleration and transport throughout the heliosphere; and for his exceptional leadership in the general space plasma community and development of space physics within Asia and Oceania.*
- *2023 NASA Group Achievement Award*, in recognition of the Parker Solar Probe team
- *2021 University Distinguished Research Award*, University of Alabama in Huntsville, 2021
- *Commencement Speaker, University of Alabama in Huntsville Fall 2019 Commencement*, Von Braun Center, December 16, 2019
- *NASA Silver Achievement Medal*, In recognition of the Parker Solar Probe team, November 2019.
- *Distinguished Scientist Fellow, Chinese Academy of Science President’s International Fellowship Initiative (PIFI) 2019*, October 2019.
- *Distinguished Speaker, NSF Distinguished Lecture Series in Mathematical and Physical Sciences*, September, 2019, Washington, DC
- *Director’s Colloquium, Los Alamos National Laboratory*, Los Alamos [January 2019]
- *2018 AAS Neil Armstrong Space Flight Achievement Award* (as a SWEAP Co-I)
- *Johannes Geiss Fellowship*, awarded by the International Space Studies Institute (ISSI), Switzerland [2017]
- *Aerojet/Rocketdyne Chair in Space Science*, University of Alabama in Huntsville [2017]
- *University of Alabama Board of Trustees Trustee Professor*, the first and only University of Alabama System faculty member on whom this position conferred [2017]
- Elected *AOGS Honorary Member* [2017]
- *The equations of reduced magnetohydrodynamics, G.P. Zank and W.H. Matthaeus, Journal of Plasma Physics, 48, 85 (1992)* selected by the Editorial Board of the Journal of Plasma Physics as one of the 12 "Classic JPP Papers" [2014]
- *Distinguished Professor of Space Science*, University of Alabama in Huntsville [2014]
- *Fellow of the American Geophysical Union* [2011]
- *NASA Group Achievement Award*, NASA [2011]
- *Quest for Excellence Award*, 2009, SciQuest

- **Solar Terrestrial Distinguished Lecture**, Asia Oceania Geosciences Society (AOGS) [2008]
- **Pei-Ling Chan Chair of Physics**, University of Alabama in Huntsville [2008-2014]
- **Eminent Scholar**, University of Alabama in Huntsville [2008-current]
- **Chancellor's Chair of Physics and Astronomy**, University of California, Riverside
- **Fellow of the American Physical Society** [2004]. Citation: For fundamental contributions to understanding of shocks, particle acceleration, and plasma turbulence and to studies of the solar wind, corona, interplanetary shocks, and global heliospheric structure.
- **Fellow of the American Association for the Advancement of Science** [2003]. Citation: For pioneering studies in space plasma physics, especially for studies of particle acceleration in the heliosphere and the origin of anomalous cosmic rays.
- **Zeldovich Medal** (awarded jointly by The Committee on Space Research (COSPAR) and The Russian Academy of Sciences to young scientists [< 36 years old]) [1996]. Citation: For his work in space plasma physics and in particular for his theoretical studies of mass loading shock formation in interplanetary space and of the interaction of the heliosphere with the local interstellar medium.
- **NSF Presidential Young Investigator Award** [1994].

SELECTED BOOKS and PUBLICATIONS

- In excess of 680 refereed publications in space and solar physics, plasma physics, and astrophysics.
- Edited 23 books and published two textbooks.
- 7 National Research Council publications
- Current h-index: 88; i10-index: 375 (i.e., publications with at least 10 citations.) (Google Scholar)
- Approximate current number of citations: ~ 27,592; Citations in 2023: ~2,212 (Google Scholar)

SELECTED ACTIVITIES

- Associate Editor, *Journal of Plasma Physics* (Cambridge University Press), June 1992 – 2007.
- Member of the COMMITTEE ON SOLAR AND SPACE PHYSICS (CSSP), National Research Council (2000-4)
- Chair of the *Theory, Modeling and Data Exploration Panel* for the Space Physics Decadal Survey, National Research Council (2001-2).
- Member of NASA Solar and Heliospheric *Management and Organization Working Group (MOWG)* (2001-3);
- Secretary of Solar and Heliospheric Physics, Space Physics and Aeronomy Section of the American Geophysical Union (AGU) (2002-4)
- Chair, International, Space, and Response (ISR) Division Review Committee, Los Alamos National Laboratory (2003-07). (Security Clearance level: Q)
- Member, Threat Reduction Program Review Committee (TR-PRC), Los Alamos National Laboratory (2003-07).
- Member, *SPACE STUDIES BOARD*, National Research Council (2005-9)
- Associate Editor, *Journal of Geophysical Research (Space)* (2006-December 2010).
- Science Editor, *The Astrophysical Journal* (2012 - current)
- Series Editor, *Lecture Notes in Physics Series*, Springer-Verlag (2015 – current)
- Member, High Altitude Observatory External Committee (2012 – 2014)
- Member, NAS/NRC Committee on NASA's Large Strategic Science Missions (2016-2017)
- Member, NAS/NRC Committee of Solar and Space Physics (CSSP) (2017-2019, 2019-21)
- Co-Chair, NAS Committee “*A Decadal Assessment of Plasma Science 2020*” (2018-20)
- Chair, External Advisory Board, NJIT Institute for Space Weather Sciences, (2020-current)
- Member, NAS *Heliophysics Decadal Assessment Steering Committee*, 2022/23
- Member, *SPACE STUDIES BOARD*, National Research Council (2023-)