

SPEAKER'S BIOGRAPHY

Gerhard Haerendel (Germany)



Gerhard Haerendel, born in 1935, received his PhD (Dr. rer. nat.) in Physics from the University of Munich (1963). Fellow (Wissenschaftliches Mitglied) of the Max-Planck-Institut für Physik und Astrophysik (1969) and Director of the Max-Planck-Institut für extraterrestrische Physik (MPE) (1972 - 2000). Honorary Professor at the Technische Universität Braunschweig (1987). Visiting Professor at the University of Iowa (1988) and at the University of California, Berkeley (2000).

As of 1986 he has been Co-Director of Skinakas Observatory (Crete). Chairman of the Council of the European Incoherent Scatter Radar (EISCAT) (1982 - 1984). First dean of the International Space University, Strasbourg (1998). Vice President of the International Academy of Astronautics (1989 - 2001), President of the Committee on Space Research (COSPAR) (1994 - 2002). Vice President and founding Dean of the School of Engineering and Science of the International

University Bremen (2000 - 2005). Chairman of the European Space Science Committee (ESSC) of the European Science Foundation (2003 - 2007). As of January 2007 he is chairman of ACHME, the advisory committee of ESA's Human Spaceflight, Microgravity and Exploration Directorate.

He has more than 40 years of experience in space research, including the function of PI of several international rocket and satellite projects such as PORCUPINE, Colored Bubbles, AMPTE, CRRES, FREJA, and EQUATOR-S. The sounding rocket work pioneered the application of the barium plasma cloud technique to various aspects of plasma and magnetospheric physics, culminating in the creation of artificial comets (1984 - 1985). Interpretations of satellite data led to the discovery of dayside boundary layers, small-scale reconnection events, high-beta plasma blobs in the magnetosphere and the in-situ confirmation of reconnection. Theoretical work on motion of plasma clouds, formation of ionospheric irregularities, equatorial spread-F, ambipolar diffusion, diffusion of trapped particles, wave-particle interactions, reconnection, boundary layers, auroral arcs, cometary interactions, origin of spicules, solar flares and gamma-ray production in neutron stars. More than 260 publications, membership in several professional societies and academies, several awards.