



Curriculum Vitae Professor Dr Wolfgang Baumjohann



Image: Markus Scholz | Leopoldina

Name: Wolfgang Baumjohann

Date of birth: 9 August 1950

Research Priorities: Space plasma physics, planetary magnetospheres

Geophysicist and space researcher Wolfgang Baumjohann has been involved in numerous experiments as part of nine international space missions. He and his team develop instruments that are used on such missions and analyse the data that these instruments collect.

Academic and Professional Career

- 2022 - 2027 President of the Division of Mathematics and the Natural Sciences, Austrian Academy of Sciences (OEAU), Austria
- since 2009 Honorary Professor, Graz University of Technology, Graz, Austria
- 2004 - 2021 Director, Space Research Institute (IWF), OEAU, Graz, Austria
- 2001 - 2004 Department Head, IWF, OEAU, Graz, Austria
- 2000 - 2008 Adjunct Professor, Ludwig-Maximilians-Universität München (LMU), Munich, Germany
- 1997 Visiting Professor, Institute of Space and Astronautical Science (ISAS), Sagamihara, Japan
- 1995 Visiting Professor, Solar-Terrestrial Environment Laboratory (STEL), Nagoya University, Nagoya, Japan
- 1993 - 2000 Private Lecturer, Ludwig-Maximilians-Universität München (LMU), Munich, Germany
- 1993 Habilitation in Geophysics, LMU, Munich, Germany
- 1989 - 2000 Researcher, Max Planck Institute for Extraterrestrial Physics, Garching, Germany

- 1983 - 1988 Heisenberg Fellow, German Research Foundation (DFG), Germany, Max Planck Institute for Extraterrestrial Physics, Garching, Germany
- 1981 - 1982 Visiting Scholar, Applied Physics Laboratory (APL), Johns Hopkins University (JHU), Laurel, USA
- 1981 PhD in Geophysics, University of Münster, Münster, Germany
- 1975 - 1983 Research Associate, Institute for Geophysics, University of Münster, Münster, Germany
- 1975 Degree in Physics, University of Münster, Münster, Germany

Functions in Scientific Societies and Committees

- 2016 - 2026 Member, Presidium, German National Academy of Sciences Leopoldina, Germany
- 2011 - 2016 Member, Senate, German National Academy of Sciences Leopoldina, Germany
- 2010 - 2022 Member, European Academies Science Advisory Council (EASAC)
- 2006 - 2009 Editor, Journal of Geophysical Research
- 2006 - 2008 Member, Space Science Advisory Committee, ESA
- 2004 Chairperson, Solar System Working Group, ESA
- 2002 - 2022 Austrian Delegate, Science Programme Committee, ESA
- 2001 - 2003 Member, Solar System Working Group, ESA
- 2000 - 2004 Associate Editor, Geophysical Research Letters
- 2000 - 2002 Member, Council, German Physical Society, Germany
- 1993 - 1996 Editor, Journal of Geomagnetism and Geoelectricity
- 1991 - 1992 Associate Editor, Journal of Geophysical Research
- 1985 - 1998 Member, Advisory Committee, EISCAT Scientific Association, Kiruna, Sweden
- 1979 - 1987 Member, Expert Committee, Magnetosphere, Federal Ministry of Research and Technology (BMFT)

Honours and Awarded Memberships

- 2019 Cardinal Innitzer Prize (Achievement Award), Archdiocese of Vienna, Austria
- 2018 Decoration of Honour for Science, Research and Art of the State of Styria, Austria
- 2018 Basic Science Award, International Academy of Astronautics (IAA)
- since 2017 Member, Academia Europaea

2016	Grand Decoration of Honour of the State of Styria, Austria
2014	Austrian Scientist of the Year, Austria
since 2010	Member, German National Academy of Sciences Leopoldina, Germany
since 2009	Member, Austrian Academy of Sciences, Austria
2007	Corresponding Member, Austrian Academy of Sciences, Austria
2007	Austrian Cross of Honour for Science and Art 1st Class, Austria
2006	ISI Most-Cited Scientist, Geosciences (top 1% 1995 - 2005)
since 2003	Fellow, American Geophysical Union, USA
since 2002	Member, International Academy of Astronautics
2001	ISI Highly Cited Researcher, Space Science (top 0.5% 1981-1999)

Research priorities

Geophysicist and space researcher Wolfgang Baumjohann has been involved in numerous experiments as part of nine international space missions. He and his team develop instruments that are used on such missions and analyse the data that these instruments collect.

His work during the Rosetta mission in 2014 became particularly well known. It was the first time in the history of space travel that a probe landed on a comet, on Churyumov–Gerasimenko. As part of this project, Wolfgang Baumjohann gained particular recognition for his communication of scientific insights to a broad public. He himself describes the communication of research results as “one of the central tasks of science.”

Wolfgang Baumjohann’s early scientific work focused on earthquakes. When investigating the ionosphere in Scandinavia, he switched his focus to the physics of nature, studying, among other things, the impact of ionised gases on the weather in space. The violent storms that can occur there are capable of creating technical difficulties for satellites and space probes.

At the Austrian Academy of Sciences’ Space Research Institute (IWF) in Graz, led by Wolfgang Baumjohann until 2021, instruments suitable for use in space are developed, in particular magnetometers and on-board computers. Wolfgang Baumjohann analyses and interprets the data collected on such missions. For the Rosetta mission alone he and his team helped develop five of the total of 21 instruments used. These instruments measure the surface and characteristics of comets. The team in Graz even led the development of “MIDAS”, the atomic force microscope used during the mission. The device analysed minute particles of dust from the comet.