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Position held:	Professor ship W2 Institut für Experimentelle und Angewandte Physik Leibnizstr. 11 24098 Kiel Germany
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Education:

Diploma, Physics, Christian-Albrechts-Universität Kiel, Germany, 1991

Dr. rer. nat./PhD, Christian-Albrechts-Universität Kiel, Germany, 1997

Habilitation, Universität Osnabrück, Germany, 2004

Professional Background:

1991-1997 Research Associate; Christian-Albrechts Universität Kiel, Germany

1998-1998 Research Associate, Centre Etude Atomique, Saclay, France

1999-2000 Research Scientist, Max-Planck-Institute für Aeronomie, Katlenburg-Lindau, Germany

2001-2005 Assistent: Universität Osnabrück, Germany

2005 Assistent: Universität Stuttgart, Germany

2005-present Full Professor, University of Kiel, Germany

Relevant Experience:

1997-present Co-I: Ulysses/ Kiel Electron Telescope

2006-present P-I: Ulysses/ Kiel Electron Telescope

2006-present P-I: SOHO/ Electron Proton Helium Instrument

2006-present Co-I: STEREO/ Solar Electron Proton Telescope

2008-present Co-I: Solar Orbiter Electron Proton Telescope

Stays in foreign countries

- ✓ Unit for Space Physics, Potchefstroom University for CHE, March, 1995, August, 1997, September, 2000, February, 2001, February, 2002. March-April, 2004, April 2010, March 2012
- ✓ Service d'Astrophysique, Commissariat 'a l'Energie Atomique (CEA), 1998.
- ✓ Bartol Research Institute, University of Delaware, October 2001.
- ✓ International Space Science Institute, February to April 2005, 2010

Biographical Sketch

Dr. Bernd Heber is a full professor (W2) at the Institute for Experimental and Applied Physics of the Christian-Albrechts-Universität of Kiel, Germany. He has expertise in cosmic ray transport, as well as in the analysis and interpretation of energetic particle data acquired by spacecraft (Helios, Ulysses, SOHO, STEREO, Pioneer, Voyager) instrumentation. He has investigated a broad range of problems relating to energetic particles in space, including solar and galactic cosmic ray propagation, shock processes, and the modulation of galactic cosmic rays as well as the cosmic ray interaction with the Earth atmosphere. His research interests also cover the development and optimization of new space instrumentation. He is the PI for energetic particle detectors on Ulysses, SOHO, and STEREO. He is and has been involved in the project studies for POEMS, Interstellar Probe, the Interstellar Heliopause Explorer, the Solar Orbiter and Juice mission. He has successfully directed diploma and phd thesis's.

Professional Services:

1996 – 2011: Chair Convener of several EGU-Meeting special sessions

2000: European Guest associate NASA Interstellar Probe Science Definition Team

2004: Member of the study team for an Interstellar Heliopause Probe

Reviewing activities for scientific journals

- a. Advances in Space Research.
- b. Space Science Reviews.
- c. Geophysical Research Letters.
- d. Journal of Geophysical Research.
- e. Astronomy & Astrophysics.
- f. Annales Geophysicae.
- g. Planetary and Space Science
- h. Journal of Atmospheric and Solar-Terrestrial Physics

Editorial experience

- ✓ "Ulysses and beyond: Focusing on the global heliosphere at solar maximum", Annales Geophysicae, 2003
- ✓ "The heliosphere at solar maximum", Advances in Space Research, 2004
- ✓ Local Organizing Committee: "Heliophysics: The Sun, the heliosphere and the Earth", 2007
- ✓ Science and Local Organizing Committees for the workshop: Sun – 360 and Guest Editor, 2011
- ✓ Science and Local Organizing Committees for the European Cosmic ray symposium and Editor, 2014 to 2015:

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- N. Dresing, R. Gómez-Herrero, A. Klassen, B. Heber, Y. Kartavykh, and W. Dröge. The Large Longitudinal Spread of Solar Energetic Particles During the 17 January 2010 Solar Event. *Solar Physics*, 281:281–300, Nov. 2012.
- W. Dröge, Y. Y. Kartavykh, N. Dresing, B. Heber, and A. Klassen. Wide longitudinal distribution of interplanetary electrons following the 7 February 2010 solar event: Observations and transport modeling. *Journal of Geophysical Research (Space Physics)*, 119:6074–6094, Aug. 2014.
- R. Gómez-Herrero, N. Dresing, A. Klassen, B. Heber, D. Lario, N. Aguada, O. E. Malandraki, J. J. Blanco, J. Rodríguez-Pacheco, and S. Banjac. Circumsolar Energetic Particle Distribution on 2011 November 3. *Astrophysical Journal*, 799:55, Jan. 2015.
- B. Heber. Cosmic Rays Through the Solar Hale Cycle. Insights from Ulysses. *Space Science Reviews*, 176:265–278, June 2013.
- B. Heber, A. Kopp, J. Gieseler, R. Müller-Mellin, H. Fichtner, K. Scherer, M. S. Potgieter, and S. E. S. Ferreira. Modulation of Galactic Cosmic Ray Protons and Electrons During an Unusual Solar Minimum. *Astrophysical Journal*, 699:1956–1963, July 2009.
- P. Kühl, S. Banjac, N. Dresing, R. Gómez-Herrero, B. Heber, A. Klassen, and C. Terasa. Proton intensity spectra during the solar energetic particle events of May 17, 2012 and January 6, 2014. *Astronomy and Astrophysics*, 576:A120, Apr. 2015.
- D. Matthiä, B. Heber, G. Reitz, M. Meier, L. Sihver, T. Berger, and K. Herbst. Temporal and spatial evolution of the solar energetic particle event on 20 January 2005 and resulting radiation doses in aviation. *Journal of Geophysical Research (Space Physics)*, 114:8104, Aug. 2009.
- D. Matthiä, K. Herbst, B. Heber, T. Berger, and G. Reitz. ^{10}Be Production in the Atmosphere by Galactic Cosmic Rays. *Space Science Reviews*, 176:333–342, June 2013.
- A. Struminsky and B. Heber. KET Ulysses Observations of SEP in and out of the Ecliptic. *Washington DC American Geophysical Union Geophysical Monograph Series*, 165:321, 2006.

