CURRICULUM VITAE

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ACADEMIC MILESTONES and RELEVANT POSITIONS:

since 10/2016	Associate Professor and Head of the Heliospheric Physics Research Group (http://swe.uni-graz.at), Institute of Physics, UNI Graz
2025	UNI4Life Certified "Mentor and Business Coach" (for STEM individuals)
2022-2024	Head of Department "Astro- and Geophysics" at the Institute of Physics, UNI Graz
2015	Habilitation in Astrophysics, UNI Graz
2014	Senior Research Fellow at the Lockheed Martin Solar and Astrophysics Lab, USA
10/2010-09/2016	University Assistant (Post-Doc), Institute of Physics, UNI Graz
2010-2014	Elise Richter Fellow at UNI Graz
2010	Project Associate for FWF at the Space Research Institute Graz
2008-2010	APART Fellow of the Austrian Academy of Sciences at UNI Graz
2007-2008	Project Associate for FWF at the Space Research Institute Graz
2005-2007	Erwin Schrödinger Fellow at the University of Zagreb, Croatia
2001-2004	PhD in Astronomy, UNI Graz

ACADEMIC PUBLICATIONS (source: NASA ADS, April 2025):

- 246 peer-reviewed scientific papers in international journals (33 as first author; more than 300 articles and abstracts in conference proceedings) with a total citation >11.000
- h-index: 61

RESEARCH TOPICS:

Structure and dynamics of the heliosphere and relation to solar sources
Multi-wavelength, multi viewpoint data, combining observations and modelling, Interdisciplinary Cross-Research (Heliophysics in Europe)

- Coronal mass ejections: evolution from Sun to IP space and interaction processes
- Solar wind: large-scale solar wind structures in IP space
- Solar surface: flare-CME relation, secondary manifestations of CMEs (e.g., coronal waves, dimmings), coronal holes
- Space Weather on Earth and Mars: detection of CMEs and co-rotating interaction regions; thermospheric, magnetospheric, and Forbush decrease effects
- Solar cycle studies: hemispheric asymmetries, periodicities, flare-sunspot relation

SCIENTIFIC ACHIEVEMENTS and AWARDS:

- 2024: Nomination for the position of *Director for the Solar and Heliospheric Physics department* MPS in Göttingen
- 2024: ESA Certificate of Appreciation in recognition of outstanding contributions to the *Solar System and Exploration Working Group* (2021-2023)
- 2019: Reserve candidate for the *Stanford University Distinguished Visiting Austrian Chair Professorship*
- 2014: *NASA Group Achievement Award to RHESSI Science and Data Analysis Team* (in recognition of sustained outstanding science achievements over a full 11-year cycle of solar activity)
- 2010: *Elise Richter fellowship (Career Development Programme for Women)* from the Austrian Science Fund
- 2008: *APART* (Austrian Programme for Advanced Research and Technology) fellowship from the Austrian Academy of Sciences
- 2005: *Erwin Schrödinger Scholarship* from the Austrian Science Fund

SCIENTIFIC PROJECTS as Principal Investigator:

- 2023-2025 “Combined analysis of space weather effects on near-Earth satellites.” (FFG ASAP 2022 CASPER; cooperation with TU Graz)
- 2021-2025 “Space Weather: the Austrian Portal” (FFG ASAP17 SWAP; cooperation with Geosphere)
- *2021-2026* SWESNET Expert Service Group Heliospheric/Ionospheric Weather (ESA)
- 2021-2024 “Use of L5 data in CME propagation models” (ESA; cooperation with RAL)
- 2020-2024 “Magnetosheath jets throughout the solar cycle” (FWF; cooperation with IWF Graz)
- 2020-2022 “Forecasting space weather effects on low Earth orbiting satellites” (FFG ASAP16 SWEETS; cooperation with TU Graz)
- 2019-2024 ISSI Bern International Team lead on “Magnetic open flux and solar wind structuring of interplanetary space”
- 2017-2021 “Constraining CMEs and Shocks by Observations and Modelling throughout the inner heliosphere" (local PI; BELSPO)
- 2017-2019 “Solar wind evolution - assessment for multi-viewpoint instruments" (FFG-ASAP13)
- 2017-2019 “ESA-SSA Expert Service Group for Heliospheric Weather – P3” (ESA)
- 2016-2017 “Early Evolution of CMEs and associated dimming regions" (ÖAD/WTZ)
- 2015-2017 “ESA-SSA Expert Service Group for Heliospheric Weather – P2” (ESA)
- 2013-2016 “Quiet solar wind flow and interacting disturbances” (NAWI-Graz)
- 2012-2015 “eHEROES: Environment for Human Exploration and RObotic Experimentation in Space” (local PI; EU FP7-SPACE)

- 2011–2015 “CMEs – dynamic evolution in the heliosphere” (FWF Richter)
- 2011–2012 “3D properties of coronal mass ejections” (FFG-ASAP7)
- 2008–2010 “Forces governing CMEs and forecasting of CME arrival times” (Austrian Academy of Sciences)
- 2005–2007 “On the feed-back relation between flares and CMEs” (FWF Schrödinger)

TEACHING at the UNIVERSITY of GRAZ:

- Supervision of PhD, Master and Bachelor students at the Institute of Physics
- Since 2002 Lectures/Seminars/Exercises/Laboratories on the subject of Solar- and Astrophysics on Master student’s level
  - Data Analyses of ground-based and space-borne instruments (remote/in-situ)
  - Physics of stellar atmospheres
  - MHD and solar-terrestrial modeling
  - Introduction to Solar Physics (Exercises)
  - Selected Problems in Astrophysical Data Analysis
  - Astronomical Laboratory 1+2
  - Instruments and Observational Techniques
  - Introduction to Planetology
  - Hydrodynamics
  - Master Seminar in Astrophysics

COMMUNITY SERVICE:

- since 2020 Austrian representative to SCOSTEP and SCOSTEP/PRESTO
- since 2019 COSPAR PSW representative of University of Graz
- since 2018 Editorial Board member for the international journal ‘Solar Physics’
- since 2017 Maintenance of the *e-CALLISTO* radio-station AUSTRIA-UNIGRAZ
- since 2015 EGU-ST Science Officer and Liaison Officer
- since 2015 National Contact for the International Space Environment Services (ISES)
- 2024 ISSI Forum Member “Towards building a European Heliophysics Community”
- 2019-2024 National Coordinator for the International Space Weather Initiative (ISWI)
- 2021-2023 Member of the ESA Solar System and Exploration Working Group
- 2019-2023 iSWAT Moderator for H2 Cluster Heliosphere Variability (iswat-cospar.org)
- 2017-2022 Member of the UN Expert Group on Space Weather
- 2012-2021 Topical Editor for Annales Geophysicae (Solar and Heliospheric Physics)
- 2015 Editor for the Coimbra Solar Physics Meeting ASPCS 2015, Vol. 504

- Referee for international journals: Nature, Solar Physics, Astronomy and Astrophysics, Astrophysical Journal, Geophysical Research Letters, Journal of Geophysical Research, Advances in Space Research, Monthly Notices of the Royal Astronomical Society, New Astronomy

- SOC Member 2023+2024+2026 „Heliophysics in Europe” (ESA-ESTEC)
- SOC member and session convener and co-convener for various international conferences (EGU, COSPAR, SCOSTEP, VarSITI, ISEST, ILWS, ESWW, …)

ORGANIZATION of SCIENTIFIC WORKSHOPS and MEETINGS:

- Organizer of the “1st Magnetosheath Jet Workshop” in Graz, held at the University of Graz, held Feb 28-Mar 2, 2023
- Organizer of the SWAP Meeting in Graz, held Feb 16, 2023
- Organizer of the “Katastrophenpotential Weltraumwetter” 2020 at the Academy of Sciences in Vienna, held Dec 9, 2020

- Organizer of the „Österreichischer Weltraumwetterworkshop 2015“ at the Kanzelhöhe Observatory, held Mar 19-20, 2015
- Co-Organizer of the Kanzelhöhe Colloquium 2013
- Co-Organizer of the EU-FP7 project HESPE 2nd year meeting held at the University of Graz in 2012
- Organizer of the Scientific Workshop "On the solar eruptions of August 1-4, 2010“ held at the University of Graz in 2011
- Co-Organizer of the Jahrestagung der OEGAA (Society for Astronomy and Astrophysics in Austria) held at the Unversity of Graz in 2005
- Co-Organizer of International Summerschool at Kanzelhöhe Observatory 2003

RESEARCH COLLABORATIONS (national/international):

- EOS, Univ. of New Hampshire, Durham, NC, USA (Zhuang, Lugaz)
- Hvar Observatory, University of Zagreb, Croatia (Dumbovic, Calogovic, Sudar, Vršnak, Brajša)
- Institute for Astrophysics, University of Göttingen, Germany (Bothmer)
- Johns Hopkins University, Applied Physics Lab, MD, USA (Vourlidas, Raptis, Howard)
- KU Leuven, Belgium (Poedts, Verbeke)
- Lockheed Martin Solar and Astrophysics Laboratory (Nitta, Aschwanden)
- NASA Goddard Space Flight Center, Greenbelt, MD, USA (Arge, Samara, Mays, Kay, Kuznetsova, Gopalswamy)
- Predictive Science, CA, USA (Linker, Caplan)
- Royal Observatory of Belgium, Brussels, Belgium (Magdalenic, Rodriguez)
- Space Research Institute, Graz, Austria (Vörös, Wedlund, Volwerk)
- Swedish Institute of Space Physics, Uppsala, Sweden (Yordanova)
- Technical University Braunschweig, Germany (Plaschke)
- Universitat de les Illes Balears, Palma, Spain (Piantschitsch)
- University of Helsinki, Finland (Asvestari, Kilpua, Pomoell, Heinemann)
- University of Science and Technology, China (Guo)
- University of Technology Graz, Austria (Krauss)