

Dr. Stephan Hachinger

Team Lead Research Data Management at LRZ

Date of birth: 05.02.1982
Gender: male
Work address: Leibniz-Rechenzentrum (LRZ)
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Academic qualification

2007 – 2011 Ph.D. project and thesis (Dr. rer. nat.) in Physics with highest distinction (“summa cum laude”) with Prof. Paolo A. Mazzali, Ph.D. and Prof. Dr. Wolfgang Hillebrandt at Technical University München
2001 – 2007 Studies of Physics (Diplom) and thesis with Prof. Paolo A. Mazzali, Ph.D. and Prof. Dr. Wolfgang Hillebrandt (Max Planck Institute for Astrophysics) at Technical University München

Positions held

2018 – Team Lead Research Data Management, Research Department (FOR), LRZ
2014 – Research Associate, Distributed Resources Group / Research Department, LRZ
2012 – 2014 Postdoctoral Researcher with Prof. Dr. Friedrich K. Röpke, Supernova/Stellar Physics Theory Group, Universität Würzburg
2011 – 2012 Postdoctoral Researcher with Prof. Paolo A. Mazzali, Ph.D., Supernova Group, Istituto Nazionale di Astrofisica Padova, Italy

Honors

2001 – 2007 5-year “scholarship for exceptionally gifted students” of the State of Bavaria (Bayerisches Begabtenstipendium, 7000 € / yr)

Languages

German (native), English (fluent), Italian (very good)

Selected teaching, seminar and supervision activities

Teaching and seminar activities

2022 Digitaler Doktorandenworkshop Forschungsdatenmanagement (INDIGO Netzwerk)
2022 Einführung in das Forschungsdatenmanagement für Studierende der Ingenieurwissenschaften (TUM) - Vorlesungstermin: "Research Data Management in High-Performance Computing (HPC)"
2021 Data Steward Training (TUM) Session: "Welche Services zu Speicherung und Archivierung von Daten gibt es als TUM-Angehöriger" (mit TUM-Bibliothek)
2021 Digitaler Doktorandenworkshop Forschungsdatenmanagement (INDIGO Netzwerk)

- 2013 Teaching assistant (University of Würzburg, 2013), general relativity course
 2006 – 2010 Teaching assistant (TU München, 2006 – 2010), physics lab courses

Supervision

- 2021 – 2022 M. Schumann (bachelor student, with J. Munke, J. Schmidt & Prof. D. Kranzlmüller)
 2018 Q. Pamp (bachelor student, with T. Weber & Prof. D. Kranzlmüller)
 2013 C. Kleiner (bachelor student, with Prof. F. K. Röpke)
 2010 Y. Nakada (internship student, with Prof. P. A. Mazzali)

Selected publications

Articles in peer-reviewed journals and book chapters

1. **Hachinger, S.** et al. (2022). Leveraging High-Performance-Computing and Cloud Computing with Unified Big-Data Workflows: The LEXIS Project. In Curry, E., Auer, S., Berre, A.J., Metzger, A., Perez, M.S., and Zillner, S. (eds.): **Technologies and Applications for Big Data Value** (Springer: Cham). ISBN:978-3-030-78306-8.
2. Zhao, X., Marshall, J., **Hachinger, S.**, Gerbig, C., Frey, M., Hase, F., and Chen, J. (2019). Analysis of total column CO₂ and CH₄ measurements in Berlin with WRF-GHG. **Atmospheric Chemistry and Physics** 19: 11279–11302.
3. Scionti, A. et al. (including **Hachinger, S.**) (2019). HPC, Cloud and big-data convergent architectures: the LEXIS approach. In: Barolli, L., Hussain, F. K., Ikeda, M. (eds.): Complex, Intelligent, and Software Intensive Systems: Proceedings of the 13th International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS-2019). **Advances in Intelligent Systems and Computing** 993: 200–212.
4. **Hachinger, S.** et al. (2017). Type Ia supernovae with and without blueshifted narrow Na I D lines - how different is their structure? **Monthly Notices of the Royal Astronomical Society** 471: 491–506.
5. **Hachinger, S.** et al. (2013). The UV/optical spectra of the Type Ia supernova SN 2010jn: a bright supernova with outer layers rich in iron-group elements. **Monthly Notices of the Royal Astronomical Society** 429: 2228–2248.
6. **Hachinger, S.**, Mazzali, P.A., Taubenberger, S., Fink, M., Pakmor, R., Hillebrandt, W., and Seitenzahl, I.R. (2012). Spectral modelling of the "super-Chandrasekhar" Type Ia SN 2009dc: testing a 2-solar-mass white dwarf explosion model and alternatives. **Monthly Notices of the Royal Astronomical Society** 427: 2057–2078.
7. **Hachinger, S.**, Mazzali, P.A., Taubenberger, S., Hillebrandt, W., Nomoto, K. and Sauer, D.N. (2012). How much H and He is "hidden" in SNe Ib/c? I. - low-mass objects. **Monthly Notices of the Royal Astronomical Society** 422: 70–88.

Other publications and conference contributions

8. Batsaikhan, A., Weismüller, J., and **Hachinger, S.** (2019). Building an IT infrastructure for citizen science research on climate change. In: International Symposium on Grids & Clouds 2019, 31st March - 5th April 2019, Academia Sinica, Taipei, Taiwan. **Proceedings of Science** 351: 032.
9. **Hachinger, S.**, Meyer-Arneck, J., Harsch, C., Bittner, M., Frank, A., Heller, H., Vogel, N., and Giemsa, E. (2018). The Alpine Environmental Data Analysis Centre (AlpEnDAC.eu): cloud-computing on demand, RDM and more. In: 20th EGU General Assembly, EGU 2018, proceedings from the conference. **Geophysical Research Abstracts** 20: 14731.
10. **Hachinger S.**, Nguyen H., Weber T., Weismüller J. (2017). Addressing knowledge and know-how biases in the environmental sciences with modern data and compute services. In Otjacques, B., Hitzelberger, P., Naumann, S., and Wohlgemuth, V. (eds.): **EnviroInfo 2017. From Science to Society: The Bridge provided by Environmental Informatics** (Shaker-Verlag: Düren): 155–162.