



Current position

Project Leader “Theory and Modelling” at Institute of Energy and Climate Research – Plasma Physics (IEK-4), FZJ (since 2017)

Previous position

Research Scientist at Institute of Energy and Climate Research – Plasma Physics (IEK-4), FZJ (1998 - 2017)

Scientific degree

Dr. rer. nat. (PhD) in Plasma Physics, University Düsseldorf (1998)

Awards, honors, memberships

Price for the best PhD thesis, University Düsseldorf (1998)

Associate Editor Contributions to Plasma Physics (since 2019)

Recent research topics

Plasma Physics, Surface Physics, Computational Physics, Fluid Dynamics, Turbulence, Plasma Catalysis

Publications (5 most important)

- S. Togo, T. Takizuka, **D. Reiser**, M. Sakamoto, Y. Ogawa, et al., Characteristics of plasma flow profiles in a super-X-divertor-like configuration, *Nucl. Materials and Energy* 19, 149 (2019) [doi:10.1016/j.nme.2019.02.016](https://doi.org/10.1016/j.nme.2019.02.016)
- **D. Reiser**, **J. Romazanov**, **Ch. Linsmeier**, On the possibility of track length based Monte-Carlo algorithms for stationary drift-diffusion systems with sources and sinks, *Journal of Computational Physics* 377, 219 (2019) [doi:10.1016/j.jcp.2018.07.051](https://doi.org/10.1016/j.jcp.2018.07.051)
- **D. Reiser** and T. Eich, Drift-based scrape-off particle width in X-point geometry, *Nucl. Fusion*, 57, 046011 (2017), [doi:10.1088/1741-4326/AA5AB7](https://doi.org/10.1088/1741-4326/AA5AB7)
- O. Schmitz, M. Becoulet, P. Cahyna, T.E. Evans, . . . , **D. Reiser**, et al., Three-dimensional modeling of plasma edge transport and divertor fluxes during application of resonant magnetic perturbations on ITER, *Nucl. Fusion* 56, 066008 (2016) [doi:10.1088/0029-5515/56/6/066008](https://doi.org/10.1088/0029-5515/56/6/066008)
- **D. Reiser**, N. Ohno, H. Tanaka, and L. Vela, A plasma source driven predator-prey like mechanism as a potential cause of spiraling intermittencies in linear plasma devices, *Phys. of Plasmas* 21, 032302 (2014) [doi:10.1063/1.4867492](https://doi.org/10.1063/1.4867492)