

FUSION “PLASMA THEORY CHALLENGES”

Dr. Tobias Görler

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Current positions

Senior Scientist, MPI for Plasma Physics, Garching (since 2018)
PI of EUROfusion E-TASC TSVV Project (35 participants) (since 2019)
Head of IPP IT Infrastructure Coordination Committee (since 2018)
Elected Chairman/Vice-Chairman of the Scientists' Representative Council (2016-2018/2018-2020)

Previous positions (two selected)

Staff Scientist, MPI for Plasma Physics, Garching (2012-2017)
PostDoc / European Goal Oriented Training in Theory Programme, MPI for Plasma Physics, Garching (2009-2012)

Scientific degree

PhD in Physics, MPI for Plasma Physics, Garching & University of Ulm (2009)

Recent research topics

Theoretical plasma turbulence research, massively parallelized gyrokinetic code development, verification & validation, fast ion induced plasma turbulence stabilization

Award

Otto Hahn Medal of the Max Planck Society (2009)

Publications (5 most important since 2014)

- **S. Freethy, T. Görler, A. J. Creely, G. D. Conway, S. S. Denk, et al.**, Validation of gyrokinetic simulations with measurements of electron temperature fluctuations and density-temperature phase angles on ASDEX Upgrade, *Phys. Plasmas* 25, 055903 (2018) [doi:10.1063/1.5018930](https://doi.org/10.1063/1.5018930)
- **A. Di Siena, T. Görler, H. Doerk, E. Poli, R. Bilato**, Fast-ion stabilization of tokamak plasma turbulence, *Nucl. Fusion* 58, 054002 (2018) [doi:10.1088/1741-4326/aaaf26](https://doi.org/10.1088/1741-4326/aaaf26)
- J. Garcia, **T. Görler**, F. Jenko, G. Giruzzi, Gyrokinetic nonlinear isotope effects in tokamak plasmas, *Nucl. Fusion* 57, 014007 (2017) [doi:10.1088/1741-4326/57/1/014007](https://doi.org/10.1088/1741-4326/57/1/014007)
- **T. Görler, N. Tronko, W. A. Hornsby, A. Bottino, R. Kleiber, et al.**, Intercode comparison of gyrokinetic global electromagnetic modes, *Phys. Plasmas* 23, 072503 (2016) [doi:10.1063/1.4954915](https://doi.org/10.1063/1.4954915) (awarded AIP Physics of Plasmas “Top Theoretical Plasma Physics Paper” in May 2018)
- **T. Görler, A. E. White, D. Told, F. Jenko, C. Holland, et al.**, A flux-matched gyrokinetic analysis of DIII-D L-mode turbulence, *Phys. Plasmas* 21, 122307 (2014) [doi:10.1063/1.4904301](https://doi.org/10.1063/1.4904301)