

Dr. habil. Philipp Lauber



Current position

Group Leader "MHD", MPI for Plasma Physics, Garching

Scientific degrees

PhD in Physics, Technical University of Munich (2003)

Habilitation, Technical University of Munich (2013)

Recent research topics

Theoretical, numerical and experimental investigation of energetic ions in Tokamaks and future burning plasmas

Awards

Otto Hahn Medal of the Max Planck Society (2004)

Osthoff Preis (2009)

Publications/Patents (5 most important)

- **Ph. Lauber, S. Günter, A. Könies, S. D. Pinches**, LIGKA: A linear gyrokinetic code for the description of background kinetic and fast particle effects on the MHD stability in tokamaks, *J. Comput. Phys.* 226, 447 (2007) [doi:10.1016/j.jcp.2007.04.019](https://doi.org/10.1016/j.jcp.2007.04.019)
- **Ph. Lauber, M. Brüdgam, D. Curran, V. Igochine, K. Sassenberg**, et al., Kinetic Alfvén Eigenmodes at ASDEX Upgrade, *Plasma Phys. Contr. F.* 51, 124009 (2009) [doi:10.1088/0741-3335/51/12/124009](https://doi.org/10.1088/0741-3335/51/12/124009)
- **Ph. Lauber**, Super-thermal particles in hot plasmas - Kinetic models, numerical solution strategies, and comparison to tokamak experiments, *Phys. Rep.* 533, 33 (2013) [doi:10.1016/j.physrep.2013.07.001](https://doi.org/10.1016/j.physrep.2013.07.001)
- **Ph. Lauber**, Local and global kinetic stability analysis of Alfvén eigenmodes in the 15 MA ITER scenario, *Plasma Phys. Contr. F.* 57, 054011 (2015) [doi:10.1088/0741-3335/57/5/054011](https://doi.org/10.1088/0741-3335/57/5/054011)
- **Ph. Lauber, B. Geiger, G. Papp, G. Por, L. Guimaraes**, et al., Strongly non-linear energetic particle dynamics in ASDEX Upgrade scenarios with core impurity accumulation, Oral & [Proceedings](#) at the *27th IAEA Fusion Energy Conference* (2018)