

## Priv. Doz. Dr. Klaus Hallatschek



### Current positions

Group Leader in the Division “Numerical Methods in Plasma Physics”, MPI for Plasma Physics, Garching  
Teaching positions: Visiting Associate Professor, Kyushu University (since 2010)  
Privatdozent, Technical University of Munich (since 2007)

### Previous positions

EURYI Group Leader, MPI for Plasma Physics, Garching (2008-2013)  
Visiting Associate Professor, NIFS, Toki

### Scientific degrees

Diploma in Computer Science, Technical University of Munich (1993)  
Diploma in Physics, Technical University of Munich (1994)  
PhD in Physics, Technical University of Munich (1997)  
Habilitation, Technical University of Munich (2006)

### Recent research topics

High temperature plasma turbulence, non-Boussinesq turbulence, zonal flows, geodesic acoustic modes, geophysical turbulence in Jovian planets

### Awards, honors, memberships

Otto Hahn Medal of the Max Planck Society (1997)  
Rosenbluth Fusion Theory Award fellow at General Atomics (2006)  
EURYI Award of European Science Foundation (2007)

### Publications (5 most important)

- **K. Hallatschek**, Turbulent saturation of tokamak core zonal flows, *Phys. Rev. Lett.* 93, 65001 (2004); [doi:10.1103/PhysRevLett.93.065001](https://doi.org/10.1103/PhysRevLett.93.065001)
- **K. Hallatschek**, Nonlinear three-dimensional flows in magnetized plasmas, *Plasma Phys. Contr. F.* 49, B137 (2007), [doi:10.1088/0741-3335/49/12B/S13](https://doi.org/10.1088/0741-3335/49/12B/S13)
- **R. Hager, K. Hallatschek**, The nonlinear dispersion relation of geodesic acoustic modes, *Phys. Plasmas*. 19, 082315 (2012); [doi:10.1063/1.4747725](https://doi.org/10.1063/1.4747725)
- **K. Hallatschek**, G. R. McKee, Excitation of Geodesic Acoustic Modes by External Fields, *Phys. Rev. Lett.* 109, 245001 (2012); [doi:10.1103/PhysRevLett.109.245001](https://doi.org/10.1103/PhysRevLett.109.245001)
- **R. Hager, K. Hallatschek**, Geodesic acoustic mode frequencies in experimental tokamak equilibria, *Plasma Phys. Contr. Fusion* 55, 035009 (2013); [doi:10.1088/0741-3335/55/3/035009](https://doi.org/10.1088/0741-3335/55/3/035009)