

Dr. Klaus Hallatschek Selected as the 2005 Rosenbluth Award Recipient

**General Atomics Welcomes The 2005 GA Rosenbluth Theory
Award Recipient Dr. Klaus Hallatschek**

**The General Atomics Rosenbluth Award for Fusion Theory was
established in 2003 to recognize and advance outstanding members
of the Fusion Energy Sciences theoretical community in their
early careers.**

(See http://fusion.gat.com/awards/rosenbluth_award/rosenbluth.html)

Dr. Hallatschek received his doctoral degree from the Technical University-Munich in 1998 and is presently a research scientist at the Max-Planck Institute of Plasma Physics in Garching, Germany. In recent years his research has focused on the interplay between turbulence and zonal flows or other global structures. He has developed a nonlocal electromagnetic two-fluid turbulence code to study the effect of small scale parameter variation on the plasma edge turbulence in tokamaks in the range from the edge to the beginning of the core regime. The observations made in these simulations led to the prediction of significant geodesic acoustic mode (GAM) activity in the edge, which was subsequently detected in various tokamak experiments. Furthermore, he has studied the balance between forces parallel and perpendicular to the magnetic field for zonal flows, which, as a practical consequence, yielded insights into the safety factor dependence of GAMs consistent with recent experiments. Other research is concerned with whether zonal flows in a tokamak are truly global modes, a new kinetic particle pinch effect (in collaboration with W. Dorland), the free energy in microturbulence simulations, and a physical model for the kinetic zonal flow polarization.

Dr. Hallatschek recently joined the GA theory group for a one-year visit and will be working closely with GA scientists in furthering his research in core and edge plasma turbulence studies.

The award is open to fusion theorists worldwide who are in their early careers. The application deadline for the next award is March 1, 2006.