

Dr. Jeff Candy Selected as the 2003 Rosenbluth Award Recipient

Dr. Jeff Candy, a staff scientist at General Atomics, has been selected as the inaugural recipient of the Rosenbluth Award for Fusion Theory, 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. Candy's most recent research centers on the nonlinear simulation of tokamak microturbulence using the gyrokinetic model. Recently, a set of first-principles calculations of electron and ion energy diffusivity in the DIII-D tokamak (in collaboration with Ron Waltz) yielded results which matched, well within error bars, the experimentally-inferred values. Previously, He has worked on the problem of self-consistent anomalous transport of energetic particles by both Alfvén eigenmodes and fishbone oscillations. Results consistently corroborated observed particle losses in the PDX and JET tokamaks, and predictive simulations showed only benign effects of fast-particle-driven modes in ITER. Other notable results are the analytic prediction of the low-shear TAE mode (LSTAE) spectrum, independent discovery of a 4th-order explicit symplectic integrator (used in computational chemistry, celestial mechanics, plasma and accelerator physics), first (semi-numerical) prediction of the high-n TAE instability window for fusion reactors (with M.N. Rosenbluth), and the design and development of two Beowulf clusters at General Atomics.

General Atomics would like to encourage young theorists worldwide to apply for the next award. The deadline for application is February 1, 2004.