Additional UCI GPS publications and talks

Publications

Statistical analysis of fluctuations and noise-driven transport in particle-in-cell simulations of plasma turbulence, I. Holod and Z. Lin, Phys. Plasmas 14, 032306 (2007). Electromagnetic global gyrokinetic simulation of shear Alfven wave dynamics in tokamak plasmas, Y. Nishimura, Z. Lin, and W. X. Wang, Phys. Plasmas 14, 042503 (2007). Nonlinear equilibria, stability and generation of zonal structures in toroidal plasma, L. Chen, F. Zonca, Nuclear Fusion 47, 886 (2007). Full torus electromagnetic gyrokinetic particle simulations with kinetic electrons, Y. Nishimura, Z. Lin, and L. Chen, Commun. Comput. Phys. 4, 2008, in press.

Talks

- Lin, Z., "Nonlinear dynamics of ETG and CTEM turbulence and their interaction with zonal flows", invited talk, 34th European Physical Society Conference on Plasma Physics, Warsaw, Poland, 2007.
- Lin, Z., "Turbulent transport via wave-particle decorrelation in collisionless plasmas", invited talk, 49th Annual Meeting of American Physical Society, Division of Plasma Physics, Orlando, 2007.
- Lin, Z., "Turbulent transport via wave-particle decorrelation in collisionless plasmas", Joint U.S.-European Transport Task Force Workshop, San Diego, 2007.
- Nishimura, Y., "Alfven Continuum and Toroidal Gap Generation in Global Electromagnetic Gyrokinetic Simulations", Joint U.S.-European Transport Task Force Workshop, San Diego, 2007.
- Holod, I., "Discrete particle noise in particle-in-cell simulations of plasma turbulence", Joint U.S.-European Transport Task Force Workshop, San Diego, 2007.
- Xiao, Y., "Gyrokinetic Simulation of Trapped Electron Mode in Tokamak Edge Plasmas", Joint U.S.-European Transport Task Force Workshop, San Diego, 2007.
- Lin, Z., "Global GTC simulation of ETG turbulence", US-Japan Joint Institute of Fusion Theory Workshop, San Diego, 2007.
- Nishimura, Y., "Electromagnetic global gyrokinetic simulation of tokamak plasmas", US-Japan Joint Institute of Fusion Theory Workshop, San Diego, 2007.
- Nishimura, Y., "Shear Alfven wave dynamics in gyrokinetic tokamak plasmas", IAEA TCM on Theory of Plasma Instability, York, UK, 2007.
- Lin, Z., "Turbulent transport in collisionless plasmas: eddy mixing or wave-particle decorrelation?", Theory Festival, Aix-en-Provence, France, 2007.
- Nishimura, Y., "Numerical properties of electromagnetic gyrokinetic particle simulations in a global tokamak geometry", 20th International Conference on Numerical Simulation of Plasmas, Austin, 2007.
- Holod, I., "Discrete particle noise in gyrokinetic particle-in-cell simulations of plasma turbulence", 20th International Conference on Numerical Simulation of Plasmas, Austin, 2007.
- Xiao, Y., Short Wavelength Trapped Electron Mode", 20th International Conference on Numerical Simulation of Plasmas, Austin, 2007.
- Lin, Z., "Fusion Research on the Cray XT", Cray Technical Workshop, San Francisco, 2008.
- Lin, Z., "GTC simulation of turbulence and transport in tokamak plasmas" Transport Task Force Workshop, Boulder, 2008.
- Nishimura, Y., "GTC full torus electromagnetic gyrokinetic particle simulations with kinetic electrons", Transport Task Force Workshop, Boulder, 2008.
- Holod, I., "Gyrokinetic particle simulations of parallel momentum transport in tokamak", Transport Task Force Workshop, Boulder, 2008.
- Xiao, Y., "CTEM Turbulence and Transport Dynamics", Transport Task Force Workshop, Boulder, 2008.