The Center for Control, Dynamical Systems, and Computation
University of California at Santa Barbara
Fall 2009 Seminar Series
Presents

Multiscale Simulations Using Particles

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Abstract:

I will present a particle based framework for multiscale simulations of transport processes in different physical systems. The talk will highlight advances and current challenges of particle methods such as the coupling of atomistic and continuous systems, and the relation of particle methods with mesh-based techniques.

About the Speaker:

Diploma in Naval Architecture (1986) from the National Technical University of Athens and a Master's degree (1987) in Naval Architecture from the University of Michigan, Ann Arbor. Master's Degree in Aeronautics (1988) and PhD in Aeronautics and Applied Mathematics (1993) from the Graduate Aeronautical Laboratories of the California Institute of Technology. Postdoctoral fellowship at the Center for Research on Parallel Computation (1993-1994) at the California Institute of Technology and research associate (1994-1997) with the Center for Turbulence Research (CTR) at NASA Ames/Stanford University. Assistant Professor in Computational Fluid Dynamics, at the Institute of Fluid Dynamics (1997-2000) at ETH Zurich. Full Professor of Computational Science (2000-present) in the Department of Computer Science at ETHZ.