List of Publications according to Subject Area

Theory and modeling of rare events


Stochastic problems with multiple time scales


Stochastic partial differential equations


**Atomistic and continuum theory of solids**


**Atomistic and continuum modeling of solids**


**Analysis of multi-scale methods**


**Atomistic and continuum modeling of complex fluids**


**Complex fluids: polymer systems, liquid crystals, etc**


**Continuum models of defects in solids**


**General results on multiscale modeling**


**Micromagnetics and Landau-Lifshitz equations**


**Numerical methods for incompressible flows**


**Burgers turbulence and passive scalar turbulence**


**Boundary layer theory and Prandtl’s equation**


**Vortex dynamics, Ginzburg-Landau equations and superconductors**


**Homogenization theory**


A posteriori error estimates of finite element methods


Miscellaneous

