

**Mike Allen** (University of Warwick)

*Simulation of Complex Fluids*

This talk will summarize some problems in the modelling of complex fluids - particularly liquid crystals and colloidal suspensions - which have been tackled both by conventional molecular dynamics simulations (in our group) and by mesoscale simulation techniques such as the lattice-Boltzmann method and solution of the hydrodynamic equations (in other groups). The desirability of extending dynamical simulations to much longer timescales without completely sacrificing the microscopic description will be discussed.