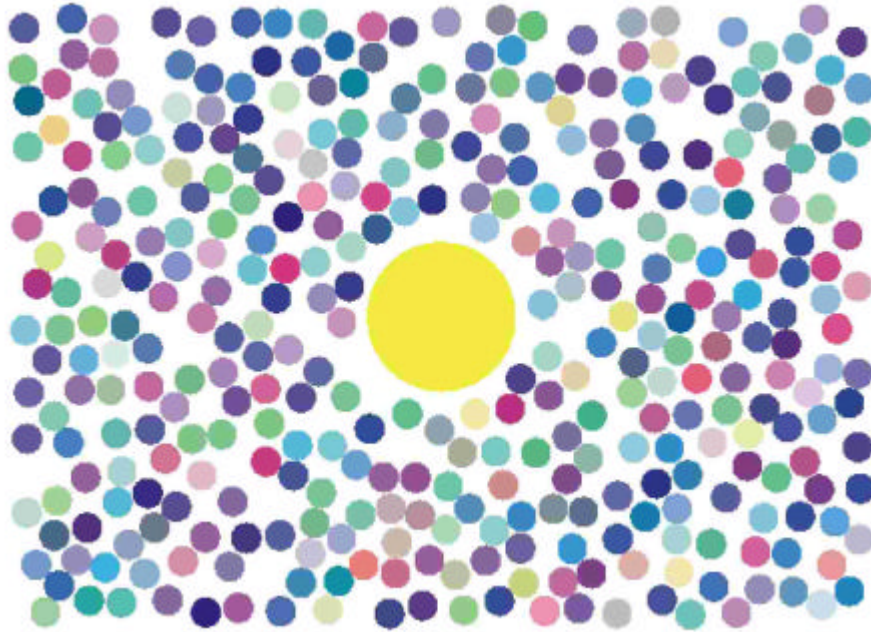


# CECAM TUTORIAL



## Computational Stochastic Methods for Mesoscale Dynamics

**May 22-24, Lyon**

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**Centre Européen de Calcul Atomique et Moléculaire**

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The theory of stochastic processes has played a central role in the study of mesoscopic systems. For example, in Brownian motion a large number of degrees of freedom are represented by a random noise force. Many equilibrium and nonequilibrium phenomena are accurately described by a stochastic representation and numerical methods, including computer simulations, have played an important role in the field.

This tutorial covers stochastic algorithms used in the simulation of mesoscopic systems, specifically methods for solving the Langevin, Master, and Boltzmann equations, as well as the general topic of random number generation. Participants from a variety of disciplines (statistical mechanics, fluid mechanics, physical chemistry, etc.) with a background in scientific programming are encouraged to attend.

For more information, see: <http://www.cecarn.fr>