Monte-Carlo rejection as a tool for measuring the energy landscape scaling of a simple liquid

GERARDO NAUMIS — A simple modification of the Monte-Carlo algorithm is proposed to explore the topography and the scaling of the energy landscape. We apply this idea to a simple hard-core fluid for which it is shown how the landscape topology determines the place where phase transition occurs.

Gerardo Naumis
Instituto de Fisica UNAM

Date submitted: 30 Nov 2004