

Geometrical Formulation of the Renormalization-group method with Application to Transport and Stochastic equations

Teiji Kunihiro
(YITP, Kyoto)

The renormalization group method is applied to obtain a reduced dynamics of ODE's and PDE's: We shall clarify that the method provides with an invariant manifold and a reduced dynamics on it. The importance of setting the initial condition in the formulation is emphasized. We shall briefly describe the method being applied to transport and stochastic equations including Langevin and Focker-Planck equations.