



قطب علمی
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سمینار هفتگی ماده چگال نرم

A Lagrangian approach to Reaction-Diffusion (RD) systems *

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Reaction-diffusion systems have many applications in different fields of science such as Biology, Chemistry and Physics.

In this lecture, I briefly introduce RD systems and furthermore explain some interesting examples.

It is commonly believed that RD equations cannot be obtained by a Lagrangian field theory. Guided by the connection between Quantum Mechanics and diffusion equations, I will explain a Lagrangian approach valid for general nonlinear RD systems which allows us to the definition of global conserved observables derived by Nother's theorem.

* I am going to talk about "Lagrangian field theory of reaction-diffusion" by C. Cherubini and S. Filippi.

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