

数学与系统科学研究院
计算数学所网络学术报告

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报告题目:

**Soliton and vortex for N-component
coupled nonlinear Schrödinger
equation: application to
Bose-Einstein condensate**

邀请人: 常向科 副研究员

报告时间: 2020 年 11 月 6 日 (周五)

下午 16:00-17:00

报告工具: 腾讯会议 (ID: 905 503 330)

Abstract:

In this talk, we will discuss both the static and dynamics of soliton and vortex for N-component coupled nonlinear Schrödinger equation, with the application in Bose-Einstein condensate. By using the variational analysis and numerical simulation, we obtain a variety of soliton and vortex, such as ring dark soliton, vortex-antivortex, half-quantum vortex, twisted and double-quantum spin vortex. Finally, the effects of variously controllable parameters on the static and dynamical properties of such topological defects are also investigated in detail.

欢迎大家参加！