

Springer Series on Atomic, Optical and Plasma Physics 45

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*Editors*

**Emergent Nonlinear Phenomena in Bose-Einstein Condensates**  
Theory and Experiment

This book, written by experts in the fields of atomic physics and nonlinear science, consists of reviews of the current state of the art at the interface of these fields, as is exemplified by the modern theme of Bose-Einstein condensates. Topics covered include bright, dark, gap and multidimensional solitons; vortices; vortex lattices; optical lattices; multicomponent condensates; manipulation of condensates; mathematical methods/rigorous results; and aspects beyond the mean field approach. A distinguishing feature of the contents is the detailed incorporation of both the experimental and theoretical viewpoints through subsections of the relevant chapters.

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