

Bose–Einstein condensation is a phase transition in which a fraction of particles of a boson gas condenses into the same quantum state known as the Bose–Einstein condensate (BEC). The aim of this book is to present a wide array of findings in the realm of BECs and on the nonlinear Schrödinger-type models that arise therein. The Defocusing Nonlinear Schrödinger Equation

- is a broad study of nonlinear excitations in self-defocusing nonlinear media,
- summarizes state-of-the-art knowledge on the defocusing nonlinear Schrödinger-type models in a single volume, and
- contains a wealth of resources, including over 800 references to relevant articles and monographs and a meticulous index for ease of navigation.

This book is intended for atomic and condensed-matter physicists, nonlinear scientists, and applied mathematicians. It will be equally valuable to beginners and experienced researchers in these fields.

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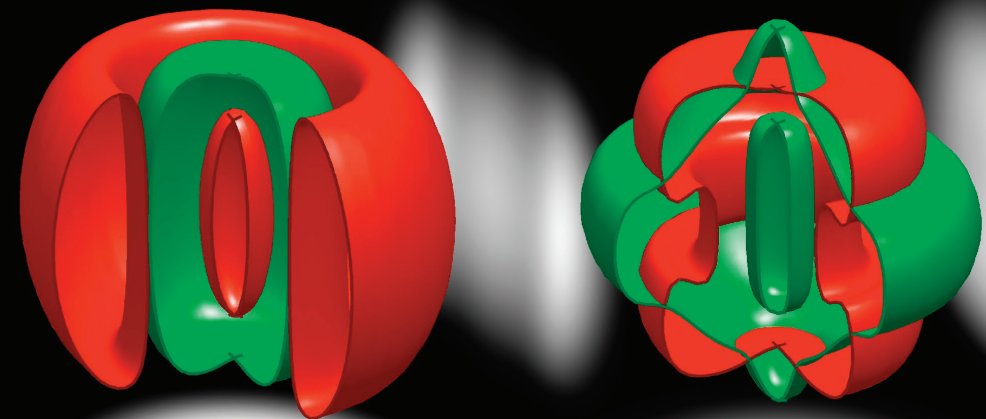
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The Defocusing Nonlinear Schrödinger Equation  
From Dark Solitons to Vortices and Vortex Rings

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Dimitri J. Frantzeskakis  
Ricardo Carretero-González

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