SUPERSYMMETRIC SOLITONS

In the last decade methods and techniques based on supersymmetry have provided deep insights in quantum chromodynamics and other non-supersymmetric gauge theories at strong coupling. This book summarizes major advances in critical solitons in supersymmetric theories, and their implications for understanding basic dynamical regularities of non-supersymmetric theories.

After an extended introduction on the theory of critical solitons, including a historical introduction, the authors focus on three topics: non-Abelian strings and confined monopoles; reducing the level of supersymmetry; and domain walls as D brane prototypes. They also provide a thorough review of issues at the cutting edge, such as non-Abelian flux tubes. The book presents an extensive summary of the current literature so that researchers in this field can understand the background and related issues. This title, first published in 2009, has been reissued as an Open Access publication on Cambridge Core.

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CAMBRIDGE
UNIVERSITY PRESS

Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

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Cambridge University Press is part of Cambridge University Press & Assessment,
a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of
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www.cambridge.org
Information on this title: www.cambridge.org/9781009402170

DOI: 10.1017/9781009402200

When citing this work, please include a reference to the DOI 10.1017/9781009402200

First published 2009
Reissued as OA 2023

A catalogue record for this publication is available from the British Library.

ISBN 978-1-009-40217-0 Hardback
ISBN 978-1-009-40222-4 Paperback