

Supergravity

Written by two of the most respected workers in the field, this is the first-ever authoritative and systematic account of supergravity. It provides a solid introduction to the fundamentals of supergravity and with numerous exercises, examples and a range of applications, it is ideal for both Ph.D. students and researchers. A website hosted by the authors, featuring solutions to some exercises and additional reading material, can be found at www.cambridge.org/supergravity.

'Over the last four decades, the theory of supergravity has emerged as a central ingredient in the search for the still-elusive unified theory of nature, and has led to many deep results in mathematical physics. This comprehensive, accessible text ... will play an essential role in our future efforts to understand nature.'

Andrew Strominger, *Harvard University*

'... a much-needed introduction to the union of general relativity with supersymmetry, written by two of the leaders in the field. The presentation is clear, well planned, and thorough.'

Joseph Polchinski, *Kavli Institute for Theoretical Physics, University of California, Santa Barbara*

'Finally there is an up-to-date textbook available that introduces supergravity to present and future generations of students. The authors take great care to explain the basic concepts of supersymmetry and supergravity in a pedagogical way ... Highly recommended.'

Bernard de Wit, *Institute for Theoretical Physics, Utrecht University*

'Supergravity is a keystone of modern theoretical physics, connecting Einstein's gravity, superstring theory, and proposed extensions of the Standard Model of particle physics... Freedman and Van Proeyen decode the structure of supergravity ... and show how to build up supergravity theories systematically.'

Michael E. Peskin, *SLAC, Stanford University*

'... the most complete and most concise textbook on the basic mathematical formalism of supergravity, its solutions and applications for the AdS/CFT correspondence on the market ... an indispensable tool for every student and researcher who wants to learn and to work with this beautiful subject.'

Dieter Lüst, *Ludwig-Maximilians-University Munich and Max Planck Institute for Physics*

'... an excellent introduction to the rich and many-faceted topic of supergravity. Students will find it to be thorough and detailed and an all around outstanding book to learn from. More senior researchers will find it to be a very valuable resource.'

Edward Witten, *The Institute for Advanced Study, Princeton University*

Cover illustration: 'Prêtre Marié' by René Magritte.

© ADAGP, Paris and DACS, London 2011.

CAMBRIDGE
UNIVERSITY PRESS
www.cambridge.org

ISBN 978-0-521-19401-3



9 780521 194013 >