第一图书网, tushu007.com

<<超弦理论（第1卷）>>

图书基本信息

书名：<<超弦理论（第1卷）>>

13位ISBN编号：9787506292009

10位ISBN编号：7506292009

出版时间：2008-5

出版时间：世界图书出版公司

作者：（英）格林 著

页数：470

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：http://www.tushu007.com

第一图书网, tushu007.com

<<超弦理论（第1卷）>>

内容概要

Recent years have brought a revival of work on string theory, which has been a source of fascination since its origins nearly twenty years ago.There seems to be a widely perceived need for a systematic, pedagogical exposition of the present state of knowledge about string theory. We hope that this book will help to meet this need. To give a comprehensive account of such a vast topic as string theory would scarcely be possible,even in two volumes with the length to which these have grown. Indeed,we have had to omit many important subjects, while treating others only sketchily. String field theory is omitted entirely (though the subject of chapter 11 is closely related to light-cone string field theory). Conformal field theory is not developed systematically, though much of the background material needed to understand recent papers on this subject is presented in chapter 3 and elsewhere.

第一图书网, tushu007.com

作者简介

作者：(英国)格林(M.B.Green) (英国)J.H.Schwarz&E.Witten

第一图书网, tushu007.com

<<超弦理论（第1卷）>>

书籍目录

Preface1 Introduction 1.1 The early days of dual models 1.1.1 The Veneziano amplitude and duality 1.1.2 High-energy behavior of the Veneziano model 1.1.3 Ramifications of the Veneziano model 1.2 Dual models of everything 1.2.1 Duality and the graviton 1.2.2 Unification in higher dimensions 1.2.3 Supersymmetry 1.3 String theory 1.3.1 The massless point particle 1.3.2 Generalization to strings 1.3.3 Constraint equations 1.4 String interactions 1.4.1 Splitting of strings 1.4.2 Vertex operators 1.4.3 Use of vertex operators 1.4.4 Evaluation of the scattering amplitude 1.4.5 The mass of the graviton 1.5 Other aspects of string theory 1.5.1 Gravitational Ward identities 1.5.2 Open strings 1.5.3 Internal symmetries of open strings 1.5.4 Recovery of the Veneziano amplitude 1.5.5 Comparison with QCD 1.5.6 Upitarity and gravity 1.6 Conclusion2 Free bosonic strings 2.1 The classical bosonic string 2.1.1 String action and its symmetries 2.1.2 The free string in Minkowski space 2.1.3 Classical covariant gauge fixing and field equations 2.2 Quantization - old covariant approach 2.2.1 Commutation relations and mode expansions 2.2.2 Virasoro algebra and physical states 2.2.3 Vertex operators 2.3 Light-cone gauge quantization 2.3.1 Light-cone gauge and Lorentz algebra 2.3.2 Construction of transverse physical states 2.3.3 The no-ghost theorem and the spectrum-generating algebra 2.3.4 Analysis of the spectrum 2.3.5 Asymptotic formulas for level densities 2.4 Summary3 Modern covariant quantization 3.1 Covariant path-integral quantization 3.1.1 Fazideev-P0pov ghosts 3.1.2 Complex world-sheet tensor calculus 3.1.3 Quantizatlon of the ghosts 3.2.1 Construction of BRST charge 3.2.2 Covariant calculation of the Virasoro anomaly 3.2.3 Virasoro, conformal and gravitational anomalies 3.2.4 Bosonization of ghost coordinates 3.3 Global aspects of the string world sheet 3.4 Strings in background fields 3.4.1 Introduction of a background spa~e-time metric 3.4.2 Weyl invariance 3.4.3 Conformal invariance and the equations of motion 3.4.4 String-theoretic corrections to general relativity 3.4.5 Inclusion of other modes 3.4.6 The dilaton expectation value and the string coupling constant 3.5 Summary4 World-sheet supersymmetry in string theory 4.1 The classical theory 4.1.1 Global world-sheet supersymmetry 4.1.2 Superspace 4.1.3 Constraint equations 4.1.4 Boundary conditions and mode expansions 4.2 Quantization - the old covariant approach 4.2.1 Commutation relations and mode expansions 4.2.2 Super-Virasoro algebra and physical states 4.2.3 Boson-emission vertex operators 4.3 Light-cone gauge quantization 4.3.1 The light-cone gauge 4.3.2 No-ghost theorem and the spectrum-generating algebra 4.3.3 The GSO conditions 4.3.4 Locally supersymmetric form of the action 4.3.5 Superstring action and its symmetries 4.4 Modern covariant quantization 4.4.1 Faddeev-Popov ghosts 4.4.2 BRST symmetry 4.4.3 Covariant computation of the Virasoro anomaly 4.5 Extended world-sheet supersymmetry 4.5.1 The N = 2 theory 4.5.2 The N = 4 theory 4.6 Summary 4.A Super Yang-Mills theories5 Space-time supersymmetry in string theory6 Nonabelian gauge symmetry7 Tree amplitudesBibliographyIndex

第一图书网, tushu007.com

章节摘录

插图：

第一图书网, tushu007.com

编辑推荐

《超弦理论(第1卷)》由世界图书出版公司出版。

第一图书网, tushu007.com

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:http://www.tushu007.com