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Nota di contenuto	Preface; Notation; Contents; 1 Introduction; 2 Singular Lagrangians and Local Symmetries; 3 Hamiltonian Approach. The Dirac Formalism; 4 Symplectic Approach to Constrained Systems; 5 Local Symmetries within the Dirac Formalism; 6 The Dirac Conjecture; 7 BFT Embedding of Second Class Systems; 8 Hamilton-Jacobi Theory of Constrained Systems; 9 Operator Quantization of Second Class Systems; 10 Functional Quantization of Second Class Systems; 11 Dynamical Gauges. BFV Functional Quantization; 12 Field-Antifield Quantization; A Local Symmetries and Singular Lagrangians B The BRST Charge of Rank One C BRST Hamiltonian of Rank One; D The FV Principal Theorem; E BRST Quantization of SU(3) Yang-Mills Theory in -gauges; Bibliography; Index
Sommario/riassunto	This book is an introduction to the field of constrained Hamiltonian systems and their quantization, a topic which is of central interest to theoretical physicists who wish to obtain a deeper understanding of the quantization of gauge theories, such as describing the fundamental interactions in nature. Beginning with the early work of Dirac, the book

covers the main developments in the field up to more recent topics, such as the field-antifield formalism of Batalin and Vilkovisky, including a short discussion of how gauge anomalies may be incorporated into this formalism. The book is comprehen

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