Record Nr. UNINA9910779319903321 Autore Fortnow Lance <1963-> Titolo The golden ticket [[electronic resource]]: P, NP, and the search for the impossible / / Lance Fortnow Princeton,: Princeton University Press, 2013 Pubbl/distr/stampa **ISBN** 1-4008-4661-7 1-299-15656-8 Edizione [Course Book] Descrizione fisica 1 online resource (189 p.) Classificazione COM051300MAT015000MAT017000MAT034000 Disciplina 511.3/52 Soggetti NP-complete problems Computer algorithms Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front matter -- Contents -- Preface -- Chapter 1 The Golden Ticket --Chapter 2 The Beautiful World -- Chapter 3 P and NP -- Chapter 4 The Hardest Problems in NP -- Chapter 5 The Prehistory of P versus NP --Chapter 6 Dealing with Hardness -- Chapter 7 Proving P NP --Chapter 8 Secrets -- Chapter 9 Quantum -- Chapter 10 The Future --Acknowledgments -- Chapter Notes and Sources -- Index Sommario/riassunto "The P-NP problem is the most important open problem in computer science, if not all of mathematics. The Golden Ticket provides a nontechnical introduction to P-NP, its rich history, and its algorithmic implications for everything we do with computers and beyond. In this informative and entertaining book, Lance Fortnow traces how the problem arose during the Cold War on both sides of the Iron Curtain. and gives examples of the problem from a variety of disciplines, including economics, physics, and biology. He explores problems that capture the full difficulty of the P-NP dilemma, from discovering the shortest route through all the rides at Disney World to finding large groups of friends on Facebook. But difficulty also has its advantages. Hard problems allow us to safely conduct electronic commerce and

maintain privacy in our online lives. The Golden Ticket explores what we truly can and cannot achieve computationally, describing the benefits and unexpected challenges of the P-NP problem"--