Record Nr. UNINA9910438157803321 Autore Louridas Sotirios E **Titolo** Problem-Solving and Selected Topics in Euclidean Geometry: In the Spirit of the Mathematical Olympiads / / by Sotirios E. Louridas, Michael Th. Rassias New York, NY:,: Springer New York:,: Imprint: Springer,, 2013 Pubbl/distr/stampa **ISBN** 1-4614-7273-3 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (X, 235 p.) 516.2 Disciplina Soggetti Geometry Algebraic geometry Mathematics Algebraic Geometry Mathematics, general Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto Foreword -- Preface -- Basic Concepts and Theorems of Euclidean Geometry -- Methods of Analysis, Synthesis, Construction and Proof.-Geometrical Constructions -- Geometrical Loci -- Problems of Olympiad Caliber -- Solutions of the Problems -- Bibliography --Index. Sommario/riassunto Problem-Solving and Selected Topics in Euclidean Geometry: In the Spirit of the Mathematical Olympiads contains theorems of particular value for the solution of Olympiad-caliber problems in Euclidean Geometry. Selected geometric problems, which have been given in International Mathematical Olympiads (IMO) or proposed in short lists in IMO, are discussed. Additionally, a number of new problems

> proposed by leading mathematicians in the subject with their step-bystep solutions are presented. The book teaches mathematical thinking through Geometry and provides inspiration for both students and teachers. From the Foreword: "...Young people need such texts, grounded in our shared intellectual history and challenging them to excel and create a continuity with the past. Geometry has seemed destined to give way in our modern computerized world to algebra. As

with Michael Th. Rassias' previous homonymous book on number theory, it is a pleasure to see the mental discipline of the ancient Greeks so well represented to a youthful audience." - Michael H. Freedman (Fields Medal in Mathematics, 1986) Sotirios E. Louridas has studied Mathematics at the University of Patras, Greece. He has been an active member of the Greek Mathematical Society for several years both as a problem poser and a coach of the Greek Mathematical Olympiad team. He has authored in Greek, a number of books in Mathematics. Michael Th. Rassias has received several awards in mathematical problem-solving competitions including two gold medals at the Pan-Hellenic Mathematical Olympiads of 2002 and 2003 (Athens. Greece), a silver medal at the Balkan Mathematical Olympiad of 2002 (Targu Mures, Romania) and a silver medal at the 44th International Mathematical Olympiad of 2003 (Tokyo, Japan). He holds a Diploma from the School of Electrical and Computer Engineering of the National Technical University of Athens and a Master of Advanced Study in Mathematics from the University of Cambridge. He is currently a PhD student in Mathematics at ETH-Zürich. At the age of 22, he authored the book Problem-Solving and Selected Topics in Number Theory: In the Spirit of the Mathematical Olympiads – Foreword by Preda Mihilescu (Springer, 2011), ISBN: 978-1-4419-0494-2.