

Proof Complexity and Feasible Arithmetics

Questions of mathematical proof and logical inference have been a significant thread in modern mathematics and have played a formative role in the development of computer science and artificial intelligence. Research in proof complexity and feasible theories of arithmetic aims at understanding not only whether or not logical inferences can be made but also what resources are required to carry them out. Understanding the resources required for logical inferences has major implications for some of the most important problems in computational complexity, particularly the problem of whether or not NP is equal to co-NP. In addition, these have important implications for the efficiency of automated reasoning systems. The last dozen years have seen several breakthroughs in the study of these resource requirement. Papers in this volume represent the proceedings of the DIMACS workshop on "Feasible Arithmetics and Proof Complexity" held in April 1996 in Rutgers, NJ, as part of the DIMACS Institute's Special Year on Logic and Algorithms. This book brings together some of the most recent work of leading researchers in proof complexity and feasible arithmetic reflecting many of these advances. It covers a number of aspects of the field including lower bounds in proof complexity, witnessing theorems and proof systems for feasible arithmetic, algebraic and combinatorial proof systems, interpolation theorems, and the relationship between proof complexity and Boolean circuit complexity.



99,50 €

92,99 € (zzgl. MwSt.)

Nicht mehr lieferbar

Artikelnummer: 9780821805770

Medium: Buch

ISBN: 978-0-8218-0577-0

Verlag: American Mathematical Society

Erscheinungstermin: 30.11.1997

Sprache(n): Englisch

Auflage: Erscheinungsjahr 1997

Produktform: Gebunden

Gewicht: 780 g

Seiten: 320

