Record Nr. UNINA9910568292603321 Autore Von Plato Jan Titolo Chapters from Gödel's Unfinished Book on Foundational Research in Mathematics / / by Jan von Plato Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2022 **ISBN** 9783030971342 9783030971335 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (221 pages) Collana Vienna Circle Institute Library ; ; 6 Disciplina 193 Soggetti Mathematics - Philosophy Mathematical logic Philosophy - History Intellectual life - History Philosophy of Mathematics Mathematical Logic and Foundations History of Philosophy Intellectual History Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preface -- Dedication -- Part I: Gödel's "Own Book on Foundations" --Chapter 1. A Gödel puzzle -- Chapter 2. The Ergebnisse book project -- Chapter 3. Gödel's reading of the logical literature -- Chapter 4. Gödel's manuscript for the Ergebnisse book series -- Part II: Own Book (Foundations) -- Chapter 5. Introduction -- Chapter 6. Logicism --Chapter 7. Antinomies -- Chapter 8. Clear version, from the beginning to the antinomies -- Chapter 9. The epistemological standpoint of the logicists -- Chapter 10. Logical calculus -- Chapter 11. Metamathematics -- Chapter 12. General metamathematics (Princeton) -- Part III: Gödel's Reading Notes -- Chapter 13. Editorial remarks --Chapter 14. The untitled notebook -- Chapter 15. The Altes Excerptenheft -- References -- Index.

This volume contains English translations of Gödel's chapters on

logicism and the antinomies and on the calculi of pure logic, as well as

Sommario/riassunto

outlines for a chapter on metamathematics. It also comprises most of his reading notes. This book is a testimony to Gödel's understanding of the situation of foundational research in mathematics after his great discovery, the incompleteness theorem of 1931. It is also a source for his views on his logical predecessors, from Leibniz, Frege, and Russell to his own times. Gödel's "own book on foundations," as he called it, is essential reading for logicians and philosophers interested in foundations. Furthermore, it opens a new chapter to the life and achievement of one of the icons of 20th century science and philosophy.