Record Nr. UNINA9910826740903321 Autore Parsons Charles <1933-> **Titolo** Philosophy of mathematics in the twentieth century: selected essays // **Charles Parsons** Pubbl/distr/stampa Cambridge, Massachusetts;; London, England:,: Harvard University Press, , 2014 ©2014 **ISBN** 0-674-41950-2 0-674-41949-9 Descrizione fisica 1 online resource (368 p.) 510.1 Disciplina Soggetti Mathematics - Philosophy Logic, Symbolic and mathematical Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Front matter -- CONTENTS -- PREFACE -- INTRODUCTION -- PART I Nota di contenuto SOME MATHEMATICIANS AS PHILOSOPHERS -- 1 THE KANTIAN LEGACY IN TWENTIETH-CENTURY FOUNDATIONS OF MATHEMATICS -- 2 REALISM AND THE DEBATE ON IMPREDICATIVITY, 1917-1944 --POSTSCRIPT TO ESSAY 2 -- 3 PAUL BERNAYS'LATER PHILOSOPHY OF MATHEMATICS -- 4 KURT GÖDEL -- 5 GÖDEL'S "RUSSELL'S MATHEMATICAL LOGIC" -- 6 QUINE AND GÖDEL ON ANALYTICITY --POSTSCRIPT TO ESSAY 6 -- 7 PLATONISM AND MATHEMATICAL INTUITION IN KURT GÖDEL'S THOUGHT -- POST SCRIPT TO ESSAY 7 --PART II CONTEMPORARIES -- 8 QUINE'S NOMINALISM -- 9 GENETIC EXPLANATION IN THE ROOTS OF REFERENCE -- 10 HAO WANG AS PHILOSOPHER AND INTERPRETER OF GÖDEL -- 11 PUTNAM ON EXISTENCE AND ONTOLOGY -- 12 WILLIAM TAIT'S PHILOSOPHY OF MATHEMATICS -- BIBLIOGRAPHY -- COPYRIGHT ACKNOWLEDGMENTS -- INDEX In this illuminating collection, Charles Parsons surveys the Sommario/riassunto contributions of philosophers and mathematicians who shaped the

philosophy of mathematics over the course of the past century. Parsons begins with a discussion of the Kantian legacy in the work of L. E. J. Brouwer, David Hilbert, and Paul Bernays, shedding light on how

Bernays revised his philosophy after his collaboration with Hilbert. He considers Hermann Weyl's idea of a "vicious circle" in the foundations of mathematics, a radical claim that elicited many challenges. Turning to Kurt Gödel, whose incompleteness theorem transformed debate on the foundations of mathematics and brought mathematical logic to maturity, Parsons discusses his essay on Bertrand Russell's mathematical logic--Gödel's first mature philosophical statement and an avowal of his Platonistic view. Philosophy of Mathematics in the Twentieth Century insightfully treats the contributions of figures the author knew personally: W. V. Quine, Hilary Putnam, Hao Wang, and William Tait. Quine's early work on ontology is explored, as is his nominalistic view of predication and his use of the genetic method of explanation in the late work The Roots of Reference. Parsons attempts to tease out Putnam's views on existence and ontology, especially in relation to logic and mathematics. Wang's contributions to subjects ranging from the concept of set, minds, and machines to the interpretation of Gödel are examined, as are Tait's axiomatic conception of mathematics, his minimalist realism, and his thoughts on historical figures.