

1. Record Nr.	UNINA9910731462303321
Autore	Felgner Ulrich
Titolo	Philosophy of Mathematics in Antiquity and in Modern Times // by Ulrich Felgner
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2023
ISBN	3-031-27304-4
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (314 pages)
Collana	Science Networks. Historical Studies, , 2296-6080 ; ; 62
Disciplina	510.1
Soggetti	Logic, Symbolic and mathematical Geometry Mathematical Logic and Foundations Filosofia de la matemàtica Història de la matemàtica Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The concept of mathematics -- Plato's philosophy of mathematics -- The Aristotelian conception of mathematics -- The axiomatic method of Euclid -- Finitism in Greek mathematics -- The paradoxes of Zeno -- On certainty in mathematics -- The Cartesian nativism, the Prometheus myth, Augustinian illuminism, and Cartesian rationalism -- John Locke's thoughts on mathematics -- Rationalism -- Empiricism in mathematics -- Immanuel Kant's conception of mathematics -- Psychologism in mathematics -- Logicism -- The concept of "set" -- Contemporary Platonism -- The problem of non-constructive proofs of existence -- The formal and the contentual position -- Dedekind and the emergence of structuralism -- Hilbert's critical philosophy -- Epilogue -- Index of names -- Index of subjects -- Index of abbreviations.
Sommario/riassunto	»Philosophy of Mathematics« is understood, in this book, as an effort to clarify such questions that mathematics itself raises but cannot answer with its own methods. These include, for example, questions about the ontological status of mathematical objects (e.g., what is the nature of

mathematical objects?) and the epistemological status of mathematical theorems (e.g., from what sources do we draw when we prove mathematical theorems?). The answers given by Plato, Aristotle, Euclid, Descartes, Locke, Leibniz, Kant, Cantor, Frege, Dedekind, Hilbert and others will be studied in detail. This will lead us to deep insights, not only into the history of mathematics, but also into the conception of mathematics as it is commonly held in the present time. The book is a translation from the German, however revised and considerably expanded. Various chapters have been completely rewritten.

---