

1. Record Nr.	UNINA9910983494703321
Autore	Panza Marco
Titolo	The Mathematical and Philosophical Legacy of Alexander Grothendieck // edited by Marco Panza, Daniele C. Struppa, Jean-Jacques Szczeciniarz
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Birkhäuser, , 2025
ISBN	9783031689345
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (876 pages)
Collana	Chapman Mathematical Notes, , 3005-1517
Altri autori (Persone)	StruppaDaniele C SzczeciniarzJean-Jacques
Disciplina	512.6
Soggetti	Algebra, Homological Geometry, Algebraic Number theory Logic, Symbolic and mathematical Mathematics History Category Theory, Homological Algebra Algebraic Geometry Number Theory Mathematical Logic and Foundations History of Mathematical Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Grothendieck's 40 Main Years (1949-1991) -- Grothendieck and Differential Equations -- The Birkho-Grothendieck Theorem -- In nite Products, Congruent Numbers -- The Enduring Legacy of Grothenedieck's Duality Theorem -- Conjectures and Counterexamples in Grothendieck's Work in Functional Analysis -- Tohoku 60 years after -- About Grothendieck Fibrations.-Grothendieck did not Believe in Universes, He believed in Topos and Schemes -- Motivating Motives -- My View on and Experience with Grothendieck's Anabelian Geometry -- Grothendieck's Use of Equality -- Towards a Geometry for Syntax -- Boolean Valued Models, Sheafifications, and Boolean Ultrapowers of

Tychono Spaces -- Investigating Definability in Propositional Logic -- Grothendieck and Model Theory -- Context-Dependence and Descent Theory -- Grothendieck and Teichmüller Modular Spaces.

Sommario/riassunto

Alexander Grothendieck is often considered one of the greatest mathematicians of the twentieth century (if not all time), and his unique vision continues to impact and inspire many fields and researchers today. Utilizing a multidisciplinary approach, this edited volume explores the profound influence his work and ideas have had not only on mathematics, but also on logic and philosophy. Chapters are written by international scholars, and many were inspired by talks given at the conference “Grothendieck, A Multifarious Giant” at Chapman University (May 24-28, 2022). Some chapters are written from a historical perspective and discuss the development of the main themes that characterized Grothendieck's work. Others are more mathematical in nature, analyzing and extending some of his more relevant and obscure results that are still not well understood. Philosophical implications and applications in logic are the subjects of other chapters. This volume will be of interest not only to mathematicians working in algebraic geometry, category theory, and other areas to which Grothendieck contributed, but also to philosophers, logicians, and historians of science.
