

1. Record Nr.	UNISA996485661103316
Autore	Friedman Michael
Titolo	Model and mathematics : from the 19th to the 21st century // editors, Michael Friedman, Karin Krauthausen
Pubbl/distr/stampa	Cham, : Springer Nature, 2022 Cham : , : Springer International Publishing AG, , 2022 ©2022
ISBN	3-030-97833-8
Descrizione fisica	1 online resource (vi, 445 pages) : illustrations (some color)
Collana	Trends in the history of science
Altri autori (Persone)	KrauthausenKarin
Soggetti	Mathematical models - History Models matemàtics Història Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	How to Grasp an Abstraction: Mathematical Models and Their Vicissitudes between 1830 and 1950. Introduction Knowing by Drawing: Geometric Material Models in 19th Century France Wilhelm Fiedler and his Models — the Polytechnic Side Models from the Nineteenth Century Used for Visualizing Optical Phenomena and Line Geometry Modeling Parallel Transport The great yogurt project: models and symmetry principles in early particle physics Interview with Myfanwy Evans: Entanglements on and Models of Periodic Minimal Surfaces The dialectics archetypes / types (universal categorical constructions / concrete models) in the work of Alexander Grothendieck ' Analogies,' 'Interpretations,' 'Images,' 'Systems' and 'Models': Some Remarks on the History of Abstract Representation in the Sciences since the Nineteenth Century Mappings, Models, Abstraction, and Imaging: Mathematical Contributions to Modern Thinking circa 1900Thinking with Notations: Epistemic Actions and Epistemic Activities in Mathematical Practice Matrices – Compensating the Loss of Anschauung Interview with Anja Sattelmacher: Between Viewing and Touching – Models and Their Materiality Interview with Ulf

Hashagen: Exhibitions and Mathematical Models in the 19th and 20th Centuries Interview with Andreas Daniel Matt: Real-Time Mathematics

Sommario/riassunto

This open access book collects the historical and medial perspectives of a systematic and epistemological analysis of the complicated, multifaceted relationship between model and mathematics, ranging from, for example, the physical mathematical models of the 19th century to the simulation and digital modelling of the 21st century. The aim of this anthology is to showcase the status of the mathematical model between abstraction and realization, presentation and representation, what is modeled and what models. This book is open access under a CC BY 4.0 license.
