1.	Record Nr.	UNINA9910619266603321
	Autore	Tornetta Gabriele Nunzio
	Titolo	Mathematical Quantum Physics : A Foundational Introduction / / by Gabriele Nunzio Tornetta
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
	ISBN	9783031148125
		9783031148118
	Edizione	[1st ed. 2022.]
	Descrizione fisica	1 online resource (187 pages)
	Disciplina	016.61483
	Soggetti	Quantum theory
		Mathematical physics
		Functional analysis
		Quantum Physics
		Mathematical Methods in Physics
		Functional Analysis
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Includes index.
	Nota di contenuto	The Basic Postulates -- Relativistic Invariance -- Quantum Mechanics -- Quantum Field Theory -- Further Topics.
	Sommario/riassunto	This book provides the rigorous mathematical foundations of Quantum Physics, from the operational meaning of the measuring process to the most recent theories for the quantum scale of space-time geometry. Topics like relativistic invariance, quantum systems with finite and infinitely many degrees of freedom, second quantisation, scattering theory, are all presented through the formalism of Operator Algebras for a precise mathematical justification. The book is targeted to graduate students and researchers in the area of theoretical/mathematical physics who want to learn about the mathematical foundations of quantum physics, as well as the mathematics students and researchers in the area of operator algebras/functional analysis who want to dive into some of the applications of the theory to physics. .