

1. Record Nr.	UNINA9910698646703321
Titolo	Bruno Touschek 100 Years [[electronic resource]] : Memorial Symposium 2021 // edited by Luisa Bonolis, Luciano Maiani, Giulia Pancheri
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-23042-6
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (X, 307 p. 128 illus., 93 illus. in color.)
Collana	Springer Proceedings in Physics, , 1867-4941 ; ; 287
Disciplina	539.72
Soggetti	<ul style="list-style-type: none"> Particles (Nuclear physics) Particle accelerators Mathematical physics Physics - History Particle Physics Accelerator Physics Theoretical, Mathematical and Computational Physics History of Physics and Astronomy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	<p>Bruno "Burl" Touschek -- Bruno Touschek (1921-1978). The path to electron-positron collisions -- AdA at Orsay -- Bruno Touschek and Statistical Mechanics -- Role of Bruno Touschek in the Realization of the Particle-Antiparticle Colliders -- Adone, Asymptotic Freedom and QCD -- The Standard Theory and Theoretical Physics in Roma -- Detectors and Experiments at the Laboratory for Electro-strong Physics: a personal view -- From the hadronic string to quantum gravity and back -- QCD and Supercomputers -- Bruno Touschek and the physics at Frascati at the time of AdA and ADONE -- Accelerators at LNF: From AdA to EuPRAXIA -- Accelerator Physics at IJCLab-ORSAY -- Technical challenges for future accelerators -- The making of AdA: Bruno Touschek's journey from Widerøe's betatron to storage rings -- The Making of ADONE -- Spontaneous symmetry breaking in particle physics -- String Theory -- Multi-Messenger Astronomy -- High</p>

Sommario/riassunto

This open access book celebrates the contribution of Bruno Touschek to theoretical physics and particle colliders in Europe. It contains direct testimonials from his former students, collaborators, and eminent scientists, among them, two Nobel Prize winners in Physics, Giorgio Parisi and Carlo Rubbia. It reviews the main developments in theoretical and accelerator physics in the second half of the twentieth century, while at the same time providing an overview of future prospects worldwide. This book is unique in that it will be of interest to historians of physics and also to the younger generation of researchers. Through the contribution of the leading protagonists, the interested scholar will learn about the past, present status, and relevance of both theoretical and experimental accelerator physics. The overview of Bruno Touschek's life and works across Europe, from pre-war Vienna to Germany, the UK, Italy, and France, adds a human dimension to the scientific narration, while the open access status makes this laudatory book available to anyone with interest.
