

1. Record Nr.	UNINA9910780725703321
Autore	Bastin Ted
Titolo	The origin of discrete particles [[electronic resource] /] / T. Bastin, C.W. Kilmister
Pubbl/distr/stampa	Singapore ; ; Hackensack, NJ, : World Scientific, c2009
ISBN	1-282-75783-0 9786612757839 981-4261-68-8
Descrizione fisica	1 online resource (191 p.)
Collana	Series on knots and everything ; ; v. 42
Altri autori (Persone)	KilmisterC. W (Clive William)
Disciplina	530.15
Soggetti	Particles (Nuclear physics) - History Quantum theory - History Mathematical physics - History Science - Philosophy - History
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Combinatorial space -- The story of the particle concept -- Dimensionality -- The simple bit-string picture -- The fine-structure constant calculated -- Process and iteration -- Pre-space : high-energy particles : non-locality -- Space, relativity and classical space -- Perception -- Current quantum physics, state/observer philosophy : complementarity -- Just six numbers -- Quantum or gravity?
Sommario/riassunto	This book is a unique summary of the results of a long research project undertaken by the authors on discreteness in modern physics. In contrast with the usual expectation that discreteness is the result of mathematical tools for insertion into a continuous theory, this more basic treatment builds up the world from the discrimination of discrete entities. This gives an algebraic structure in which certain fixed numbers arise. As such, one agrees with the measured value of the fine-structure constant to one part in 10,000,000 (107). <i>Sample Chapter(s)</i> Foreword (56 KB) Chapter 1: I