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Disciplina	511.6
Soggetti	Nonassociative rings Rings (Algebra) Mathematical physics Algebraic topology Combinatorics Non-associative Rings and Algebras Mathematical Physics Algebraic Topology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Part I Lecture notes. - 1 Introduction to vertex algebras, Poisson vertex algebras, and integrable Hamiltonian PDE -- 2 An introduction to algebras of chiral differential operators -- 3 Representations of Lie Superalgebras -- 4 Introduction to W-algebras and their representation theory. Part II Contributed papers -- 5 Representations of the framisation of the Temperley–Lieb algebra -- 6 Some semi-direct products with free algebras of symmetric invariants -- 7 On extensions of affine vertex algebras at half-integer levels -- 8 Dirac cohomology in representation theory -- 9 Superconformal Vertex Algebras and Jacobi Forms -- 10 Centralizers of nilpotent elements and related problems -- 11 Pluri-Canonical Models of Supersymmetric Curves -- 12 Report on the Broué-Malle-Rouquier conjectures -- 13 A generalization of the Davis-Januskiewicz construction -- 14 Restrictions of free arrangements and the division theorem -- 15 The pure braid groups and their relatives -- 16 Homological

representations of braid groups and the space of conformal blocks --  
17 Totally nonnegative matrices, quantum matrices and back, via  
Poisson geometry.

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Sommario/riassunto

Lie theory is a mathematical framework for encoding the concept of symmetries of a problem, and was the central theme of an INdAM intensive research period at the Centro de Giorgi in Pisa, Italy, in the academic year 2014-2015. This book gathers the key outcomes of this period, addressing topics such as: structure and representation theory of vertex algebras, Lie algebras and superalgebras, as well as hyperplane arrangements with different approaches, ranging from geometry and topology to combinatorics.

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