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| Nota di contenuto | 1 Dražen Adamovi, Victor G. Kac, Pierluigi Möseneder Frajria, Paolo Papi and Ozren Perše, Kostant's pair of Lie type and conformal embeddings -- 2 Dan Barbasch and Pavle Pandži, Twisted Dirac index and applications to characters -- 3 Katrina Barron, Nathan Vander Werf, and Jinwei Yang, The level one Zhu algebra for the Heisenberg vertex operator algebra -- 4 Marijana Butorac, Quasi-particle bases of principal subspaces of affine Lie algebras -- 5 Alessandro D'Andrea, The Poisson Lie algebra, Rumin's complex and base change -- 6 Alberto De Sole, Classical and quantum W -algebras and applications to Hamiltonian equations -- 7 Shashank Kanade and David Ridout, NGK and HLZ: fusion for physicists and mathematicians -- 8 Antun Milas and Michael Penn and Josh Wauchope, Permutation orbifolds of rank three fermionic vertex superalgebras -- 9 Mirko Primc, Some combinatorial coincidences for standard representations of affine Lie algebras. |
| Sommario/riassunto | This book focuses on recent developments in the theory of vertex algebras, with particular emphasis on affine vertex algebras, affine W-algebras, and W-algebras appearing in physical theories such as logarithmic conformal field theory. It is widely accepted in the mathematical community that the best way to study the representation |

theory of affine Kac–Moody algebras is by investigating the representation theory of the associated affine vertex and W-algebras. In this volume, this general idea can be seen at work from several points of view. Most relevant state of the art topics are covered, including fusion, relationships with finite dimensional Lie theory, permutation orbifolds, higher Zhu algebras, connections with combinatorics, and mathematical physics. The volume is based on the INdAM Workshop Affine, Vertex and W-algebras, held in Rome from 11 to 15 December 2017. It will be of interest to all researchers in the field.