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Nota di contenuto	Anthony Joseph, A Tribute to Bertram Kostant -- Anton Alekseev, Arkady Berenstein, Benjamin Hoffman, Yanpeng Li, Poisson Structures and Potentials -- Tomoyuki Arakawa, Kazuya Kawasetsu, Quasi-lisse Vertex Algebras and Modular Linear Differential Equations -- Roman Bezrukavnikov, Ivan Losev, On Dimension Growth of Modular Irreducible Representations of Semisimple Lie Algebras -- Alexander Braverman, David Kazhdan, Remarks on the Asymptotic Hecke Algebra -- Alexei Davydov, Pavel Etingof, Dmitri Nikshych, Autoequivalences of Tensor Categories Attached to Quantum Groups at Roots of 1 -- Victor Ginzburg, Nil-Hecke Algebras and Whittaker $\mathscr{D}$ -Modules -- V. Guillemin, A. Uribe, Z. Wang, Spectral Properties of Semi-classical Toeplitz Operators -- Anthony Joseph, Dual Kashiwara Functions for the $B(\infty)$ Crystal -- Victor G. Kac, Minoru Wakimoto, On Characters of Irreducible Highest Weight Modules of Negative Integer

Level over Affine Lie Algebras -- Thomas Lam, Alexander Postnikov, Alcoved Polytopes II -- Ivan Losev, Representation Theory of Quantized Gieseker Varieties, I -- Jiang-Hua Lu, Yipeng Mi, Generalized Bruhat Cells and Completeness of Hamiltonian Flows of Kogan-Zelevinsky Integrable Systems -- G. Lusztig, On the Definition of Almost Characters -- Eckhard Meinrenken, Verlinde Formulas for Nonsimply Connected Groups -- Paul-Émile Paradan, Michèle Vergne, Equivariant Index of Twisted Dirac Operations and Semi-classical Limits -- Vladimir L. Popov, Modality of Representations and Packets for θ -Groups -- N. Ressayre, Distributions on Homogeneous Spaces and Applications -- Jean-Pierre Serre, On the mod p reduction of orthogonal representations.

Sommario/riassunto

This volume, dedicated to the memory of the great American mathematician Bertram Kostant (May 24, 1928 – February 2, 2017), is a collection of 19 invited papers by leading mathematicians working in Lie theory, representation theory, algebra, geometry, and mathematical physics. Kostant's fundamental work in all of these areas has provided deep new insights and connections, and has created new fields of research. This volume features the only published articles of important recent results of the contributors with full details of their proofs. Key topics include: Poisson structures and potentials (A. Alekseev, A. Berenstein, B. Hoffman) Vertex algebras (T. Arakawa, K. Kawasetsu) Modular irreducible representations of semisimple Lie algebras (R. Bezrukavnikov, I. Losev) Asymptotic Hecke algebras (A. Braverman, D. Kazhdan) Tensor categories and quantum groups (A. Davydov, P. Etingof, D. Nikshych) Nil-Hecke algebras and Whittaker D-modules (V. Ginzburg) Toeplitz operators (V. Guillemin, A. Uribe, Z. Wang) Kashiwara crystals (A. Joseph) Characters of highest weight modules (V. Kac, M. Wakimoto) Alcove polytopes (T. Lam, A. Postnikov) Representation theory of quantized Gieseker varieties (I. Losev) Generalized Bruhat cells and integrable systems (J.-H. Liu, Y. Mi) Almost characters (G. Lusztig) Verlinde formulas (E. Meinrenken) Dirac operator and equivariant index (P.-É. Paradan, M. Vergne) Modality of representations and geometry of θ -groups (V. L. Popov) Distributions on homogeneous spaces (N. Ressayre) Reduction of orthogonal representations (J.-P. Serre).
