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Nota di contenuto	Lectures on cyclotomic Hecke algebras / Susumu Ariki -- An introduction to group doublecross products and some uses / Edwin Beggs -- Canonical bases and piecewise-linear combinatorics / Roger Carter & Robert Marsh -- Integrable and Weyl modules for quantum affine sl / Vyjayanthi Chari & Andrew Pressley -- Notes on balanced categories and Hopf algebras / Bernhard Drabant -- Lectures on the dynamical Yang-Baxter equations / Pavel Etinghof & Olivier Schiffmann -- Quantized primitive ideal spaces as quotients of affine algebraic varieties / K.R. Goodearl -- Representations of semisimple Lie algebras in positive characteristic and quantum groups at roots of unity / Iain Gordon -- The Yang-Baxter equation for operators on function fields /

Jintai Ding & Timothy J. Hodges -- Noncommutative differential geometry and twisting of quantum groups / Shahn Majid -- Finite quantum groups and pointed Hopf algebras / Ian M. Musson -- On some two parameter quantum and Jordanian deformations, and their coloured extensions / Deepak Parashar & Roger J. McDermott -- Tensor categories and Braid reprentations / Hans Wenzl.

Sommario/riassunto

Since its genesis in the early 1980s, the subject of quantum groups has grown rapidly. By the late 1990s most of the foundational issues had been resolved and many of the outstanding problems clearly formulated. To take stock and to discuss the most fruitful directions for future research many of the world's leading figures in this area met at the Durham Symposium on Quantum Groups in the summer of 1999, and this volume provides an excellent overview of the material presented there. It includes important surveys of both cyclotomic Hecke algebras and the dynamical Yang-Baxter equation. Plus contributions which treat the construction and classification of quantum groups or the associated solutions of the quantum Yang-Baxter equation. The representation theory of quantum groups is discussed, as is the function algebra approach to quantum groups, and there is a new look at the origins of quantum groups in the theory of integrable systems.