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Abstracts of Short Communications and Posters

Section:

7. Lie Groups and Lie Algebras

1991 MS Classification: 16, 17, 18
Phung, Ho Hai, Hanoi Institute of Mathematics, Vietnam
Rational representations of matrix quantum groups of type A_n
A matrix quantum group of type A_n is obtained from an even Hecke symmetry via Faddeev-Reshetikhin-Takhtajan's construction. We study rational representations of these quantum groups. We show that the category rational representations of such a quantum group is uniquely determined, up to an equivalence of braided abelian categories, by the rank of the symmetry and a quantum parameter q. A notion of formal characters is also introduced. As a by-product, we derive a formula for computing irreducible characters of the Hecke algebras.
Reference: Phung Ho Hai, On matrix quantum groups of type A_n, Preprint ICTP-97101, q-alg 9708007.