1. Record Nr. UNINA9910827438403321

Autore	Parshall Brian <1945->
Titolo	Quantum linear groups / / Brian Parshall, Jian-pan Wang
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , 1991 ©1991
ISBN	1-4704-0862-7
Descrizione fisica	1 online resource (168 p.)
Collana	Memoirs of the American Mathematical Society, , 0065-9266 ; ; Number 439
Disciplina	512/.2
Soggetti	Linear algebraic groups Representations of groups Group schemes (Mathematics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"January 1991, Volume 89, Number 439 (second of 3 numbers)."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	""Contents""; ""Introduction""; ""1. Quantum Groups""; ""1.1. Quantum affine spaces""; ""1.2. Quantum groups""; ""1.3. Direct products""; ""1.4. Closed subgroups""; ""1.5. Normal closed subgroups""; ""1.6. Kernels and exact sequences""; ""1.7. Cartesian squares""; ""1.8. Coverings""; ""2. Representation Theory of Quantum Groups""; ""2.1. Rational representations""; ""2.2. Functorial description""; ""2.3. Defining matrices""; ""2.4. Contragradient modules and tensor products""; ""2.5. Characters and character groups""; ""2.6. Fixed points""; ""2.7. Induction""; ""2.8. Injective objects"" ""2.9. Exact subgroups of quantum groups""""""2.10. A theorem on central faithfully flat morphisms""; ""2.11. The Hochschild-Serre spectral sequence""; ""3. Quantum Matrix Spaces""; ""3.1. Quadratic algebras""; ""3.2. Quasi-Yang-Baxter algebras""; ""3.3. Basis theorem for quasi-Yang-Baxter algebras""; ""3.4. The quadratic algebras K[A[sup (na€Œ0)][sub(q)]] and K[A[sup(na€Œ0)][sub(q)]]""; ""3.5. The quantum matrix space M[sub(q)](n)""; ""3.6. The bialgebra structure on K[M[sub (q)](n)]""; ""3.7. Some automorphisms and anti-automorphisms"" ""3.8. K[A[sup(na€Œ0)][sub(q)]] and K[A[sup(na€Œ0)][sub(q)] as K[M [sub(q)](n)]-comodules""""""4. Quantum Determinants""; ""4.1. Quantum determinant""; ""4.2. First properties of the determinant""; ""4.3. Subdeterminants""; ""4.4. Laplace expansions""; ""4.5. Some

commutators, I""; ""4.6. The centrality of the determinant""; ""5. The Antipode and Quantum Linear Groups""; ""5.1. Some commutators, II""; ""5.2. Some commutators, III""; ""5.3. Quantum general and special linear groups""; ""5.4. A property of the antipode""; ""6. Some Closed Subgroups""; ""6.1. Parabolic and Levi subgroups""
""6.2. Some properties of the parabolic and Levi subgroups""""6.3. Some remarks""; ""6.4. Coadjoint action of the maximal torus and the root system""; ""6.5. Character groups of T[sub(q)] and B[sub(q)]""; ""7. Frobenius Morphisms and Kernels""; ""7.1. Gaussian polynomials""; ""7.2. Frobenius morphisms""; ""7.3. Infinitesimal subgroups""; ""7.4. Some homological properties of GL[sub(q)](n)""; ""7.5. Some exact subgroups of GL[sub(q)](n)""; ""8. Global Representation Theory""; ""8.1. Density of the ""big cell""""; ""8.2. Highest weight modules""
""8.3. Some properties of induced G[sub(q)]-modules""""8.4. Induction to parabolic subgroups""; ""8.5. The semisimple rank 1 case, I""; ""8.6. The semisimple rank 1 case, II""; ""8.7. The one-to-one correspondence between irreducible modules and dominant weights""; ""8.8. Formal characters and their invariance under the Weyl group""; ""8.9. Injective modules for Borel subgroups""; ""8.10. A finiteness theorem; Weyl modules""; ""9. Infinitesimal Representation Theory""; ""9.1. An infinitesimal version of the ""density theorem""""
""9.2. Highest weight and irreducible representations for (G[sub(q)])[sub(1)]-T and (G[sub(q)])[sub(1)]-B""