

1. Record Nr.	UNINA9910819099303321
Autore	Natale Sonia <1972->
Titolo	Semisolvability of semisimple Hopf algebras of low dimension // Sonia Natale
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , 2007 ©2007
ISBN	1-4704-0478-8
Descrizione fisica	1 online resource (138 p.)
Collana	Memoirs of the American Mathematical Society, , 0065-9266 ; ; Volume 186, Number 874
Classificazione	31.23
Disciplina	512.55
Soggetti	Hopf algebras Quantum groups
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Volume 186, Number 874 (fourth of five numbers)."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	<p>""Contents""; ""Introduction and Main Results""; ""Conventions and Notation""; ""Chapter 1. Semisimple Hopf Algebras""; ""1.1. Algebra structure""; ""1.2. Irreducible characters""; ""1.3. Coinvariants of Hopf algebra maps""; ""1.4. Yetter- Drinfeld modules""; ""1.5. Yetter- Drinfeld modules and the character algebra""; ""1.6. One dimensional Yetter- Drinfeld modules""; ""1.7. $H[\sup(\text{co}B)]$ as a left coideal of H""; ""Chapter 2. The Nichols-Richmond Theorem""; ""2.1. Irreducible characters of degree 2""; ""2.2. The Nichols-Richmond theorem""; ""2.3. An application to $D(H)$""</p> <p>""2.4. Existence of proper Hopf subalgebras""""2.5. Hopf subalgebras of index 3""; ""Chapter 3. Quotient Coalgebras""; ""3.1. A multiplicity formula""; ""3.2. Stable subcoalgebras""; ""3.3. Quotients modulo group- like Hopf subalgebras""; ""3.4. On the structure of $G(H)$""; ""3.5. A criterion of normality""; ""Chapter 4. Braided Hopf Algebras""; ""4.1. Radford- Majid biproduct construction""; ""4.2. Coalgebra structure of R""; ""4.3. Hopf subalgebras""; ""4.4. Biproducts over finite groups""; ""4.5. Cocommutative braided Hopf algebras""</p> <p>""4.6. Cocommutative braided Hopf algebras over $Z[\sub(p)]$""""4.7. Transitive actions of central subgroups""; ""Chapter 5. Cocycle Deformations of Some Hopf Algebras""; ""5.1. Lifting from abelian groups""; ""5.2. Examples in dimension $pq[\sup(2)]$; $p = 1 \text{ mod } q$"";</p>

""5.3. Examples in dimension $pq[\sup(2)]$; $q = 1 \pmod p$ ""; ""5.4. Normal Hopf subalgebras in cocycle twists""; ""Chapter 6. Dimension 24""; ""6.1. Possible (co)-algebra structures""; ""6.2. Upper and lower semisolvability""; ""Chapter 7. Dimension 30""; ""7.1. Possible (co)-algebra structures""; ""7.2. Classification""
""Chapter 8. Dimension 36""""8.1. Reduction of the problem""; ""8.2. Main result""; ""Chapter 9. Dimension 40""; ""9.1. Reduction of the problem""; ""9.2. Main result""; ""Chapter 10. Dimension 42""; ""10.1. Possible (co)-algebra structures""; ""10.2. Classification""; ""Chapter 11. Dimension 48""; ""11.1. First reduction""; ""11.2. Further reductions""; ""11.3. Main result up to cocycle twists""; ""11.4. Main result""; ""Chapter 12. Dimension 54""; ""12.1. First reduction""; ""12.2. Main result""; ""Chapter 13. Dimension 56""; ""13.1. First reduction""; ""13.2. Main result""
""Appendix A. Drinfeld Double of $H[\sub(8)]$ """"A.1. Structure of $D(H[\sub(8)])$ ""; ""A.2. Proof of Theorem A.1.1""; ""A.3. Proof of Theorem A.1.2""; ""Bibliography""
