

1. Record Nr.	UNINA9910483733203321
Autore	Voigt Christian
Titolo	Complex semisimple quantum groups and representation theory / / Christian Voigt, Robert Yuncken
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2020] ©2020
ISBN	3-030-52463-9
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (X, 376 p. 25 illus.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 2264
Disciplina	512.2
Soggetti	Group theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	This book provides a thorough introduction to the theory of complex semisimple quantum groups, that is, Drinfeld doubles of q -deformations of compact semisimple Lie groups. The presentation is comprehensive, beginning with background information on Hopf algebras, and ending with the classification of admissible representations of the q -deformation of a complex semisimple Lie group. The main components are: - a thorough introduction to quantized universal enveloping algebras over general base fields and generic deformation parameters, including finite dimensional representation theory, the Poincaré-Birkhoff-Witt Theorem, the locally finite part, and the Harish-Chandra homomorphism, - the analytic theory of quantized complex semisimple Lie groups in terms of quantized algebras of functions and their duals, - algebraic representation theory in terms of category O , and - analytic representation theory of quantized complex semisimple groups. Given its scope, the book will be a valuable resource for both graduate students and researchers in the area of quantum groups.