

1. Record Nr.	UNINA9910136809103321
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Titolo	Quantization on Nilpotent Lie Groups [[electronic resource]] / by Veronique Fischer, Michael Ruzhansky
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2016
ISBN	3-319-29558-6
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XIII, 557 p. 1 illus. in color.)
Collana	Progress in Mathematics, , 0743-1643 ; ; 314
Disciplina	512.55 512.482
Soggetti	Topological groups Lie groups Harmonic analysis Functional analysis Mathematical physics Topological Groups, Lie Groups Abstract Harmonic Analysis Functional Analysis Mathematical Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Preface -- Introduction -- Notation and conventions -- 1 Preliminaries on Lie groups -- 2 Quantization on compact Lie groups -- 3 Homogeneous Lie groups -- 4 Rockland operators and Sobolev spaces -- 5 Quantization on graded Lie groups -- 6 Pseudo-differential operators on the Heisenberg group -- A Miscellaneous -- B Group C^* and von Neumann algebras -- Schrödinger representations and Weyl quantization -- Explicit symbolic calculus on the Heisenberg group -- List of quantizations -- Bibliography -- Index.
Sommario/riassunto	This book presents a consistent development of the Kohn-Nirenberg type global quantization theory in the setting of graded nilpotent Lie groups in terms of their representations. It contains a detailed exposition of related background topics on homogeneous Lie groups, nilpotent Lie groups, and the analysis of Rockland operators on graded

Lie groups together with their associated Sobolev spaces. For the specific example of the Heisenberg group the theory is illustrated in detail. In addition, the book features a brief account of the corresponding quantization theory in the setting of compact Lie groups. The monograph is the winner of the 2014 Ferran Sunyer i Balaguer Prize.
