

1. Record Nr.	UNINA9910782196103321
Titolo	Locally compact quantum groups and groupoids [[electronic resource] ] : proceedings of the meeting of theoretical physicists and mathematicians, Strasbourg, February 21-23, 2002 // editor, Leonid Vainerman
Pubbl/distr/stampa	Berlin ; ; New York, : Walter de Gruyter, 2003
ISBN	1-282-19505-0 9786612195051 3-11-020005-8
Descrizione fisica	1 online resource (255 p.)
Collana	IRMA lectures in mathematics and theoretical physics ; ; 2
Classificazione	SI 290
Altri autori (Persone)	VainermanLeonid
Disciplina	530.14/3
Soggetti	Quantum groups Quantum groupoids Locally compact groups Mathematical physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Front matter -- Table of Contents -- Introduction of the editor -- Quantum groupoids and pseudo-multiplicative unitaries -- Quantum $SU(1, 1)$ and its Pontryagin dual -- Morita base change in quantum groupoids -- Galois actions by finite quantum groupoids -- On low-dimensional locally compact quantum groups -- Multiplicative partial isometries and finite quantum groupoids -- Multiplier Hopf -algebras with positive integrals: A laboratory for locally compact quantum groups -- Backmatter
Sommario/riassunto	The book contains seven refereed research papers on locally compact quantum groups and groupoids by leading experts in the respective fields. These contributions are based on talks presented on the occasion of the meeting between mathematicians and theoretical physicists held in Strasbourg from February 21 to February 23, 2002. Topics covered are: various constructions of locally compact quantum groups and their multiplicative unitaries; duality theory for locally compact quantum groups; combinatorial quantization of flat

connections associated with  $SL(2, \mathbb{C})$ ; quantum groupoids, especially coming from Depth 2 Extensions of von Neumann algebras,  $C^*$ -algebras and Rings. Many mathematical results are motivated by problems in theoretical physics. Historical remarks set the results presented in perspective. Directed at research mathematicians and theoretical physicists as well as graduate students, the volume will give an overview of a field of research in which great progress has been achieved in the last few years, with new ties to many other areas of mathematics and physics.

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