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Nota di contenuto	Front matter -- Preface -- Table of Contents -- Deformation quantization, methods and applications / Halbout, Gilles -- Deformation quantization: genesis, developments and metamorphoses / Dito, Giuseppe / Sternheimer, Daniel -- Deformation quantization of covariant fields / Dito, Giuseppe -- On the trace density in deformation quantization / Fedosov, Boris -- Deformed double Yangians and quasi-Hopf algebras / Arnaudon, Daniel / Avan, Jean / Frappat, Luc / Ragoucy, Eric -- On the representation theory of deformation quantization / Waldmann, Stefan -- Unimodular vector fields and deformation quantization / Roger, Claude -- Harrison cohomology and abelian deformation quantization on algebraic varieties / Frønsdal, Christian -- Related semi-classical and Toeplitz algebras / Monvel, Louis Boutet de -- Fedosov connections on jet bundles and deformation quantization / Cattaneo, Alberto S. / Felder, Giovanni / Tomassini, Lorenzo -- Quantization of Lie bialgebras via the formality of the operad of little disks / Tamarkin, Dimitri
Sommario/riassunto	This book contains eleven refereed research papers on deformation quantization 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 in May 2001. Topics covered are: star-products over

Poisson manifolds, quantization of Hopf algebras, index theorems, globalization and cohomological problems. Both the mathematical and the physical approach ranging from asymptotic quantum electrodynamics to operads and prop theory will be presented. Historical remarks and surveys 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 that has seen enourmous acticity in the last years, with new ties to many other areas of mathematics and physics.