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Titolo	Coherent States and Their Applications : A Contemporary Panorama // edited by Jean-Pierre Antoine, Fabio Bagarello, Jean-Pierre Gazeau
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Soggetti	Physics Mathematical physics Quantum physics Harmonic analysis Mathematical Methods in Physics Mathematical Applications in the Physical Sciences Quantum Physics Abstract Harmonic Analysis
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Square integrable representations, an invaluable tool -- On strongly closed and tracial star-products on Poisson manifolds -- Continuous frames and the Kadison-Singer problem -- A squeezed review on coherent states and nonclassicality for non-Hermitian systems with minimal length -- Coherent states and their generalizations for a charged particle in a magnetic field -- Coherence, squeezing and entanglement, an example of peaceful coexistence -- Non-Hermitian coherent states for finite-dimensional systems.
Sommario/riassunto	Coherent states (CS) were originally introduced in 1926 by Schrödinger and rediscovered in the early 1960s in the context of laser physics. Since then, they have evolved into an extremely rich domain that pervades virtually every corner of physics, and have also given rise to a range of research topics in mathematics. The purpose of the 2016 CIRM conference was to bring together leading experts in the field with scientists interested in related topics, to jointly investigate their

applications in physics, their various mathematical properties, and their generalizations in many directions. Instead of traditional proceedings, this book presents sixteen longer review-type contributions, which are the outcome of a collaborative effort by many conference participants, subsequently reviewed by independent experts. The book aptly illustrates the diversity of CS aspects, from purely mathematical topics to physical applications, including quantum gravity.

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