



Selected Papers from the 16th International Conference on Squeezed States and Uncertainty Relations (ICSSUR 2019)

Guest Editors:

Prof. Dr. Margarita A. Man'ko

Lebedev Physical Institute,
Leninskii Prospect 53, 119991
Moscow, Russia

Prof. Dr. Luis L. Sánchez-Soto

Departamento de Óptica,
Facultad de Física, Universidad
Complutense, 28040 Madrid,
Spain

Deadline for manuscript
submissions:

closed (30 November 2019)

Message from the Guest Editors

Dear Colleagues,

This Special Issue will publish selected papers from the 16th International Conference on Squeezed States and Uncertainty Relations (**ICSSUR 2019**), which will take place on 17–21 June 2019 in Madrid, Spain. Submissions should be received before the start of the conference and will be rapidly reviewed during or shortly after the conference.

ICSSUR covers a wide range of topics from quantum optics to quantum atom optics and quantum information:

- coherent states and squeezed states;
- uncertainty relations;
- quantum superpositions;
- entanglement and decoherence;
- phase-space methods; implementations of quantum computation and communication;
- continuous variables and quantum-information processing with continuous variables;
- twin photons, including their sources, properties, and applications;
- photon-number-resolving detectors, homodyne detection, and other detection techniques;
- atom and molecular optics with emphasis on non-classical behavior;
- cavity and circuit QED;
- quantum memories and quantum gates;
- quantum propagation;
- quantum key distribution.



mdpi.com/si/28294

Special Issue

In addition to the above, related topics are included.



quantum

an Open
Access
Journal by
MDPI

CITESCORE
3.3

Editor-in-Chief

Prof. Dr. Lev Vaidman

Raymond and Beverly Sackler
School of Physics and
Astronomy, Tel Aviv University,
Tel Aviv 69978, Israel

Message from the Editor-in-Chief

We get more and more evidence that quantum theory is the correct description of nature. It was born a century ago by explaining a few paradoxical results that could not be understood in the framework of classical physics. Today, quantum physics leads technological revolution in metrology, communication, computation, and the design of novel materials. Still it needs more solid foundations, and we need to develop a deeper understanding of how it can be used for new applications.

Quantum Reports is an online, open-access journal providing an advanced forum for clarifying foundations of quantum theory and developing its applications in all fields of physics and technology. *Quantum Reports* is inviting innovative and insightful contributions from the growing community of researchers of quantum science.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#) and [other databases](#).

Journal Rank: CiteScore - Q2 (*Physics and Astronomy (miscellaneous)*)

Contact Us

Quantum Reports Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/quantumrep
quantr@mdpi.com