Special Issue

Quantum Entanglement—Second Edition

Message from the Guest Editors

Quantum entanglement and, more in general, quantum correlations, represent acharacteristic trait of quantum mechanics. In recent years, quantum entanglement and its correlations have become a formidable tool for overcoming the classical limits in several fields, ranging from calculus and communication to imaging and metrology. We can quantify quantum entanglement and correlations in different ways. Some of these measures hierarchically relate to each other. These measures have also been extensively applied in many fields, ranging from quantum optics to atomic and molecular physics. This Special Issue aims to present both theoretical and experimental works related to quantum entanglement and correlations. The welcome theoretical and experimental papers on all aspects of research on quantum correlations, ranging from purely abstract matter to commercial applications. Topics of interest include but are not limited to quantum technologies (including quantum information, quantum communication, quantum metrology and sensing, quantum imaging, and so forth), foundations of quantum mechanics, and new measures and applications of quantum correlations.

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