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Cold Atom Physics and Precision Measurements

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Message from the Guest Editors

Dear Colleagues,

With the development of ultracold atom experimental technology, ultracold atoms provide an excellent research platform for many-body quantum physics and quantum precision measurements. Using the well-developed quantum control technology, people can study many novel many-body quantum effects based on ultracold atomic systems, and can prepare and manipulate some non-Gaussian multi-particle entangled states that can be used for quantum precision measurement.

This Special Issue invites contributions reporting on the basic research on of cold atoms and applications in precision measurements. Moreover, contributions should fall within the scope of the journal *Symmetry*.



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Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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