Special Issue

Quantum Battery Applications

Message from the Guest Editor

As the advent of the heat engine required the development of thermodynamics, the quantum technology ecosystem will require the development of quantum thermodynamic theory. One of the insights arising out of this research programme is the notion of a quantum battery (QB). QBs are driven either by quantum entanglement, which reduces the number of traversed states in the Hilbert space compared to (classical) separable states alone or by cooperative behaviour that increases the effective quantum coupling between battery and source. The idea of a QB is a powerful one, therefore it is imperative that we find out whether it is just a theoretical curiosity or a practical quantum technology. This Special Issue invites researchers to submit original research on the potential applications of QBs.

Guest Editor

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Deadline for manuscript submissions

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