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Thermodynamic and relativistic uncertainty relations

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Thermodynamic uncertainty relation (UR) was verified experimentally. The experiments have shown the validity of the quantum analogue of the zeroth law of stochastic thermodynamics in the form of the saturated Schrödinger UR. We have also proposed a new type of UR for the relativistic mechanics.

These relations allow us to consider macroscopic phenomena in the within the limits of the ratio of the uncertainty relations for different physical quantities

Primary author(s): ARTAMONOV, Anton (University of Oulu)

Co-author(s): Dr. PLOTNIKOV, Evgeniy (The National Research Tomsk Polytechnic University)

Presenter(s): ARTAMONOV, Anton (University of Oulu)

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