The 2nd international conference on particle physics and astrophysics

Contribution ID : 254

Type : Poster

## Thermodynamic and relativistic uncertainty relations

Monday, 10 October 2016 15:15 (30)

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)

Session Classification : Poster session - I

Track Classification : Nuclear physics and particle physics