Contribution ID: **8** Type: **Lecture**

Introduction to the hydrokinetic approach.

Wednesday 10 January 2018 09:45 (45 minutes)

1. Introduction to the hydrokinetic approach.

The modern integrated hydrokinetic approach to A+A collisions will be presented. It includes a complete spatiotemporal picture of nucleus-nucleus collisions :
1) the formation of an initial nonthermal state of matter characterized by a certain distribution of the ultrahigh energy density;
2) a description of the process of thermalization of such an initial nonequilibrium state and the formation of (almost) locally-equilibrium initial conditions for the subsequent hydrodynamic expansion of the system;
3) viscous relativistic hydrodynamic chemically-equilibrium evolution of quark-gluon and then hadronic matter;
4) decay of a thermally and chemically (almost) locally-equilibrium medium into hadrons and resonances;
5) the evolution of the interacting hadron-resonant gas, and the formation of observable quantities.

Author: Prof. SINYUKOV, Yuriy (BITP)

Presenter: Prof. SINYUKOV, Yuriy (BITP)