

Contribution ID: 24

Type: Talk

## K\* probe of hadron matter created in A+A collisions.

Tuesday 7 November 2017 09:25 (30 minutes)

The production of the K(892) strange resonance in A+A collisions is analyzed within the integrated hydrokinetic model (iHKM) at different equations of state of superdense matter. A modification of experimental K(892)identification is studied for different centralities in view of possible re-scattering of the decay products in the hot hadronic medium at the afterburner stage of the fireball evolution. We see quite intensive rescattering of the decay products as well as recombination processes for these resonances. In addition, the production of the much longer-long-lived phi(1020) resonance with hidden strange quark content is investigated. The main idea for using such resonances as a probe of hot hadronic matter is the intermediate life time of them, especially of the K\*(892), that is compared with duration of hot hadron phase in A+A collisions.

Published in October 2017 in V.M.Shapoval, P.Braun-Munzinger, Yu.M.Sinyukov, Nuclear Physics A 968 (2017) 391–402

Author: Prof. SINYUKOV, Yuriy (Bogolyubov Institute for Theoretical Physics)
Presenter: Prof. SINYUKOV, Yuriy (Bogolyubov Institute for Theoretical Physics)
Session Classification: Session 1; 7-nov 2017;

Track Classification: NICA acceleration and experimental complex