The 22nd International Conference on
Strangeness in Quark Matter
22-27 March, 2026, Los Angeles, CA

Contribution ID: **221**   Type: **Poster Presentation**

Canonical statistical hadronization with local charge conservation

Tuesday, 24 March 2026 19:22 (1 minute)

We present a framework to study (cross-)cumulants and balance functions of identified hadrons in heavy-ion and hadronic collisions using two-point correlation function with local charge conservation. We discuss the effects of multiple conserved charges (in particular strangeness), as well as correlations due to hadronic interactions, resonance decays, baryon annihilation, and light nuclei formation. We analyze the behavior of various observables accessible to experiments at LHC and RHIC, with a particular focus on strangeness fluctuations, and discuss how these can be shed light on the hadronization mechanism as well criticality.

Authors: KUZNIETSOV, Volodymyr (University of Houston);   Prof. VOVCHENKO, Volodymyr (University of Houston)

Presenter: KUZNIETSOV, Volodymyr (University of Houston)

Session Classification: Poster Session