

# Quark Matter 2019 - the XXVIIIth International Conference on Ultra-relativistic Nucleus-Nucleus Collisions



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## Cross-correlators of conserved charges in QCD

*Monday, 4 November 2019 17:40 (20 minutes)*

We present our continuum extrapolated lattice QCD results for the cross-correlators of baryon number, electric charge and strangeness, and compare them to calculations from the Hadron Resonance Gas (HRG) model with the most up-to-date hadronic spectrum. We analyze the contributions to these observables from hadronic correlations and self-correlations, and their relation to experimentally measurable quantities. We study the dependence of the cross-correlators on the kinematic cuts, and suggest novel observables to allow for a model-independent comparison to experimental results. We perform the direct comparison to available experimental results, for observables related to net- $\Lambda$  and net-kaon fluctuations.

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