



Contribution ID: 24

Type: **Poster presentation**

Imprints of clustering in multiplicity fluctuations

Tuesday 3 September 2024 18:50 (20 minutes)

We investigate the multiplicity fluctuations of charged particles observed in high-energy nuclear collisions and relate them to the size of hadronizing systems which happen during such processes. We use the average multiplicities N and variances $\text{Var}(N)$ of multiplicity distributions of charged particles produced in centrality selected collisions of relativistic heavy-ion nuclei to evaluate the dynamic variance Ω and study its dependence on the size of colliding systems. We connect the observed system-size dependence of multiplicity fluctuations with the clustering phenomena and the finiteness of the hadronizing sources and the thermal bath.

Is this an abstract from experimental collaboration?

No

Name of experiment and experimental site

NA61

Is the speaker for that presentation defined?

Yes

Details

The poster is based on the paper: <http://dx.doi.org/10.1140/epja/s10050-023-00983-z>

Internet talk

Maybe

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Session Classification: Poster Session

Track Classification: Main topics: Heavy Ion Collisions and Critical Phenomena