



Contribution ID: 365

Type: **Parallel Talk**

## Search for the critical point by the NA61/SHINE experiment

*Wednesday, 16 May 2018 10:00 (20 minutes)*

NA61/SHINE is a fixed target experiment operating at CERN SPS. Its main goals are to search for the critical point of the strongly interacting matter and to study the onset of deconfinement. For these goals a scan of the two dimensional phase diagram ( $T-\mu_B$ ) is being performed at the SPS by measurements of hadron production in proton-proton, proton-nucleus and nucleus-nucleus interactions as a function of collision energy.

In this contribution the status of the search for the critical point of strongly interacting matter by the NA61/SHINE Collaboration will be presented including recent results on proton intermittency, strongly intensive fluctuation observables of multiplicity and transverse momentum and higher moments of net charge fluctuations. These measurements are expected to be sensitive to the correlation length and, therefore, have the ability to reveal the existence of the critical point via possible non-monotonic behavior. The new NA61/SHINE results are compared to the corresponding NA49 measurements and model predictions.

### Content type

Experiment

### Collaboration

NA61/SHINE

### Centralised submission by Collaboration

Presenter name already specified

**Primary author:** ANDRONOV, Evgeny (St Petersburg State University (RU))

**Presenter:** ANDRONOV, Evgeny (St Petersburg State University (RU))

**Session Classification:** Phase diagram and search for the critical point

**Track Classification:** Phase diagram and search for the critical point