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

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The existence and location of the QCD critical point is an object of both experimental and theoretical studies. One of the main goals of NA61/SHINE, a fixed-target experiment at the CERN SPS, is the search for the critical point of strongly interacting matter. The comprehensive data collected during a two-dimensional scan in beam momentum (13A-150A GeV/c) and system size (p+p, p+Pb, Be+Be, Ar+Sc, Xe+La, Pb+Pb) allows for a systematic search for the critical point - the search for a non-monotonic dependence of various correlation and fluctuation observables on collision energy and size of colliding nuclei. An example of such observable is local fluctuations of particle densities in transverse momentum space, which can be probed with an intermittency analysis by measuring the scaling behavior of factorial moments of multiplicity distributions. This contribution will review ongoing NA61/SHINE studies to search for the critical point of strongly interacting matter.

### Is this abstract from experiment?

Yes

### Name of experiment and experimental site

NA61/SHINE at the CERN SPS

### Is the speaker for that presentation defined?

Yes

### Details

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### Internet talk

No

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