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## Search for the critical point of strongly interacting matter by NA61/SHINE at the CERN SPS

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The existence and location of the QCD critical point is an object of both experimental and theoretical studies. The comprehensive data collected by the NA61/SHINE 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 – a search for a non-monotonic dependence of various correlation and fluctuation observables on collision energy and size of colliding nuclei. In particular, fluctuations of particle number in transverse momentum space are studied. They are quantified by measuring the scaled factorial moments of multiplicity distributions.

This contribution reviews ongoing NA61/SHINE studies to search for the critical point of the strongly interacting matter.

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