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

The existence and location of the QCD critical point are objects of both experimental and theoretical studies. The comprehensive data collected by NA61/SHINE at the CERN SPS 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 of strongly interacting matter through the analysis of the scaled factorial moments of the second and higher orders as a function of the phase space cell size in the transverse momentum plane.

The recent results will be presented for protons and negatively charged hadrons from Pb+Pb collisions at  $13A$  ( $\sqrt{s_{NN}} \approx 5.1$  GeV),  $30A$  GeV/ $c$  ( $\sqrt{s_{NN}} \approx 7.6$  GeV), and Ar+Sc at  $13A$ ,  $19A$ ,  $30A$ ,  $40A$ ,  $75A$ , and  $150A$  GeV/ $c$  beam momentum ( $\sqrt{s_{NN}} \approx 5.1$ - $16.8$  GeV). No intermittency signal is observed, which seems to be in tension with the corresponding results of the STAR Collaboration at the Relativistic Heavy Ion Collider (RHIC).

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