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## **Transverse momentum and multiplicity fluctuations in Ar+Sc collisions at CERN SPS from NA61/SHINE**

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The NA61/SHINE experiment aims to discover the critical point of strongly interacting matter and study the properties of 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-nucleus and nucleus-nucleus interactions as a function of collision energy and system size.

In this contribution preliminary results on transverse momentum and multiplicity fluctuations expressed in terms of strongly intensive quantities from the Ar+Sc energy scan will be presented. These fluctuations are supposed to be sensitive to the critical point existence. The NA61/SHINE results are compared with p+p and Be+Be energy scan as well as NA49 measurements and model predictions.

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