## PANIC2021 Conference



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## Study of the phase diagram of strongly interacting matter in the NA61/SHINE experiment

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NA61/SHINE (SPS Heavy Ion and Neutrino Experiment) is a fixed target experiment located at the CERN SPS. Its strong interactions programme is devoted to study properties of the phase diagram of strongly interacting matter. For this goal the two-dimensional scan is performed by measurements of hadron production properties as a function of collision energy (13A - 158A GeV/c) and system size (p+p, p+Pb, Be+Be, Ar+Sc, Xe+La, Pb+Pb). This contribution presents new results on the onset of deconfinement - the transition between the state of hadronic matter and the quark-gluon plasma. Also, new results on fluctuations and correlations devoted to the search for the critical point of strongly interacting matter will be presented. Obtained results will be compared with available data from other experiments and from various theoretical models.

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