

Diagram of high-energy nuclear collisions –new results on Xe+La central collisions from NA61/SHINE at CERN SPS

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NA61/SHINE is a multipurpose fixed-target experiment located at CERN SPS. One of its main goals is to study the onset of deconfinement and the properties of strongly interacting matter. For this purpose, a unique two-dimensional scan in collision energy ($\sqrt{s_{NN}} = 5.1 - 16.8/17.3$ GeV) and system size was performed. Results on identified hadron spectra produced in nucleus-nucleus collisions, including the first results for Xe+La collisions, will be presented. The kinematic distributions and measured multiplicities of identified hadrons will be compared across various colliding systems and different collision energies. The diagram of high-energy nuclear collisions emerging from this discussion will be introduced along with its possible interpretation based on successful modeling approaches.

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