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Recent results from NA61/SHINE strong interaction program.

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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 phase diagram of strongly interacting matter. For this purpose, a unique two-dimensional scan in beam momentum $13A-150(8)A$ GeV/c and the system size including p+p, p+Pb, Be+Be, Ar+Sc, Xe+La, and Pb+Pb collisions was performed. The main goal of the strong interaction program is to understand the onset of deconfinement and locate the critical point of strongly interacting matter.

The latest results from the NA61/SHINE strong interaction program will be reviewed, focusing on hadron spectra and fluctuations in various collisions. The new results on strangeness production, particularly the ratio of positively charged kaons to pions, will be presented, including the first results for Xe+La collisions. The presentation will also review the recent NA61/SHINE results on proton and negatively charged hadrons intermittency to search for the QCD critical point. The NA61/SHINE data will be compared with other experimental results and predictions from theoretical models like EPOS, PHSD, UrQMD, and confronted with Power-law model predictions.

session

G. Heavy Ion Physics

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