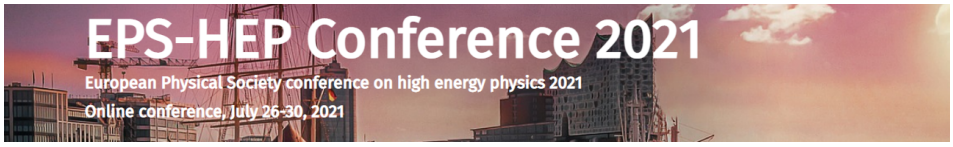

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News from the NA61/SHINE strong-interactions program at CERN SPS

Tuesday 27 July 2021 16:15 (15 minutes)

NA61/SHINE is a multipurpose fixed-target facility at the CERN Super Proton Synchrotron. The main goals of the NA61/SHINE strong-interactions program are to discover the critical point of strongly interacting matter as well as to study the properties of produced particles relevant for the study of the onset of deconfinement - the transition between the state of hadronic matter and the quark-gluon plasma., An analysis of hadron production properties is performed in nucleus-nucleus, proton-proton and proton-nucleus interactions as a function of collision energy and size of the colliding nuclei to achieve these goals.

In this presentation, the NA61/SHINE results from a strong interaction measurement program will be presented. In particular, the latest results from different reactions p+p, Be+Be, Ar+Sc, and Pb+Pb on hadron spectra and fluctuations are planned to be discussed. The NA61/SHINE results will be compared with results from worldwide experiments and with predictions of various theoretical models, like EPOS, PHSD, UrQMD and others. Finally, the motivation, NA61/SHINE plans of the measurements after LS2 and LS3 at the Super Proton Synchrotron energies will be shown.

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Collaboration / Activity

NA61/SHINE

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