Quark Matter 2015 - XXV International Conference on Ultrarelativistic Nucleus-Nucleus Collisions



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NA61/SHINE results on fluctuations and correlations in p+p and Be+Be interactions at CERN SPS energies

Monday, 28 September 2015 17:00 (20 minutes)

The aim of the NA61/SHINE strong interaction programme is to explore the phase diagram of strongly interacting matter. The main physics goals are the study of the onset of deconfinement and the search for the critical point of strongly interacting matter. These goals are pursued by performing an beam momentum (13A - 158A GeV/c) and system size (p+p, p+Pb, Be+Be, Ar+Sc, Xe+La) scan.

This contribution presents results on transverse momentum and multiplicity fluctuations from the Be+Be and p+p energy scan. Also, results on two-particle correlations in pseudorapidity and azimuthal angle obtained in p+p interactions will be shown. The influence of conservation laws and resonance decays on multiplicity and chemical fluctuations of identified particles in p+p interactions will be discussed. Obtained results will be compared with other experiments and with model predictions.

On behalf of collaboration:

NA61

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