

Study of $\pi^+\pi^-$ and K^+K^- production in central exclusive processes with the STAR detector at RHIC

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We shall report the measurement on central exclusive production processes $pp \rightarrow pXp$ through Double Pomeron Exchange mechanism in proton-proton collisions at RHIC with the STAR detector at $\sqrt{s} = 510$ -GeV. The centrally produced particles were reconstructed in the central detector and identified using the ionization energy loss and the time of flight method. The diffractively scattered protons moving intact inside the RHIC beam pipe after the collision were measured in Roman Pots detectors allowing full control over interaction kinematics and verification of the exclusivity. Results in the form of invariant mass distribution of centrally produced $\pi^+\pi^-$ and K^+K^- pairs shall be presented.

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