

## **$J/\psi$ polarization in p+p collisions at $\sqrt{s} = 200$ GeV at STAR**

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Currently there are many models with different assumptions regarding  $J/\psi$  production mechanism that seem to describe the production cross section from experimental data reasonably well. Information on  $J/\psi$  spin alignment, commonly named as  $J/\psi$  polarization, may allow to discriminate  $J/\psi$  production models. Moreover the prediction that  $J/\psi$  polarization is transverse momentum dependent needs to be tested.

Analysis of  $J/\psi$  polarization at mid-rapidity in p+p collisions at  $\sqrt{s} = 200$  GeV registered in the STAR experiment will be presented. Data were triggered by the STAR Electromagnetic Calorimeter.  $J/\psi$  is analyzed through its dielectron decay channel. The  $J/\psi$  polarization is extracted from the decay angular distribution measured in the helicity frame.

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