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Υ production in d+Au collisions at STAR

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The production of heavy quarkonia states in p+p, p+A and A+A collisions provides insight into the properties of the Quark-Gluon Plasma. The suppression pattern of these states can be used as a thermometer of the excited QCD matter. Therefore, the study of Υ production is of paramount importance.

In the high luminosity (32 nb^{-1}) d+Au Run in year 2008, STAR has reduced the material in front of the TPC, which significantly reduced the photonic electron background by a factor of ~ 10. This provides an opportunity to measure Υ production in d+Au collisions with an improved signal-to-noise compared to the previous runs.

In this talk, we present the Υ measurements in d+Au collisions at $\sqrt{s_{\rm NN}} = 200$ GeV from the STAR experiment. We also compare the Υ yields measured in p+p and Au+Au collisions from previous runs. This measurement provides a first look at quantifying cold nuclear matter effects for bottomonium.