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Bottom cross-section measurement in p+p collisions using dielectrons at $\sqrt{s} = 200$ GeV measured by the PHENIX Experiment at RHIC

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The dielectron mass spectrum is a unique probe to directly access the different stages of a heavy-ion collision. The intermediate ($1 < m_{e^+e^-} < 3$ GeV/c^2) and high ($4 < m_{e^+e^-} < 8$ GeV/c^2) mass regions are dominated by semi-leptonic decays of open charm and beauty respectively, and so provide information about the heavy flavor dynamics. We will present the current status on the bottom cross-section extracted in p+p collisions. The method utilizes the double differential fit done in $m_{e^+e^-}$ and p_T space, which provides sensitivity to the regions where either charm or bottom dominates. A comparison to the p_T spectrum and cross-section extracted from the d+Au dielectron mass spectrum using the same technique will be presented.

On behalf of collaboration:

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