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Simulation study of bottomonium suppression measurement by the sPHENIX experiment.

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Measurements of bottomonium states in heavy-ion collisions provide a powerful tool to study both initial-state effects on heavy-quark production and final-state interactions between heavy quarks and the hot and dense nuclear matter created in relativistic heavy ion collisions.

The sPHENIX experiment, which will start taking data in early 2023, plans to measure the production of bottomonium states $\Upsilon(nS)$ in Pb+Pb and p+p collisions in di-electron channel.

In this poster we describe the results of a full Monte-Carlo study of Upsilon measurements by the sPHENIX experiment with the emphasis on estimation of expected accuracy of nuclear modification factor (R_{AA}) measurement. Details of the study as well as plans for the nearest future are presented.

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