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Bottomonium suppression at RHIC and LHC[1] BRANDON KROUPPA, Kent State University, ALEXANDER ROTHKOPF, Heidelberg University, RADOSLAW RYBLEWSKI, Polish Academy of Sciences, MICHAEL STRICKLAND, Kent State University — Bottomonium suppression has long been discussed as a probe of quark-gluon plasma dynamics in ultra-relativistic heavy ion collisions and has been observed at both the LHC and RHIC particle accelerators. Using a realistic hydrodynamic background, we compute the suppression of bottomonium states and compare to data from STAR 200 GeV/nucleon and CMS/ALICE collisions, both at 2.76 TeV/nucleon and 5.02 TeV/nucleon collision energies. We find that models which incorporate in-medium suppression of heavy quark bound states can explain experimental observations reasonably well and that the level of suppression is incompatible with only cold nuclear matter effects. Recent work incorporates a lattice-vetted heavy-quark potential and regeneration effects on bottomomium states.

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