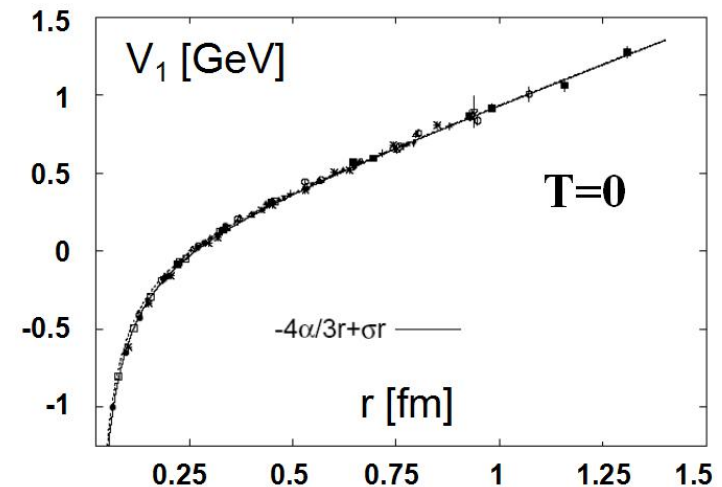


In-Medium Bottomonium Production in Heavy-Ion Collisions

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Motivation

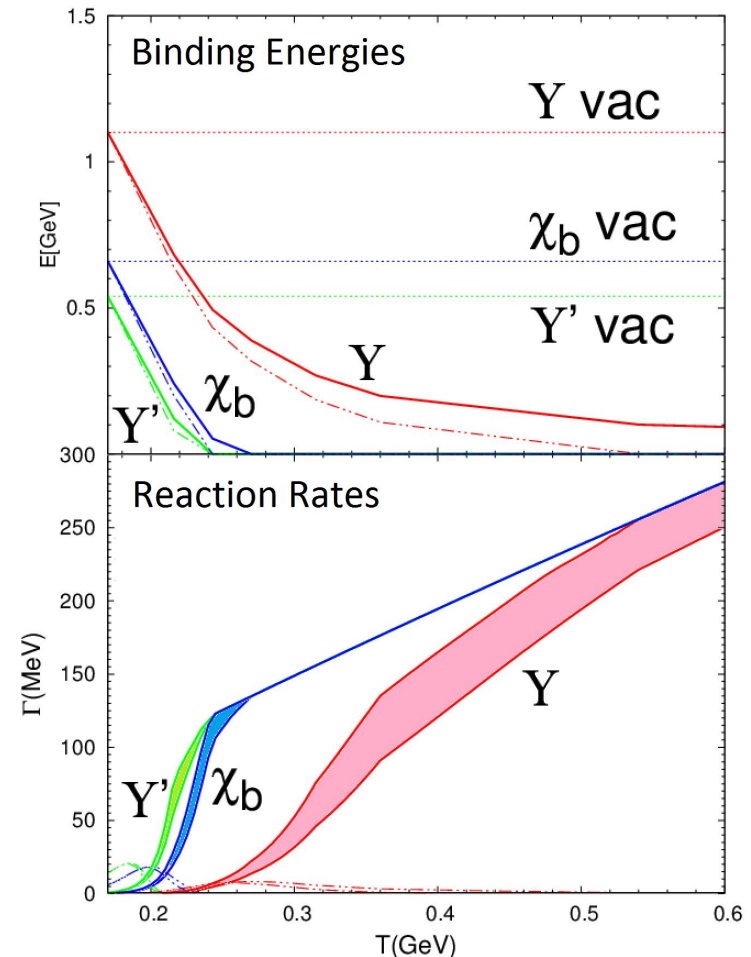
- What can the production systematics of quarkonia tell us about the in-medium QCD force?
- Extend previously established transport model framework of charmonium to bottomonium states.



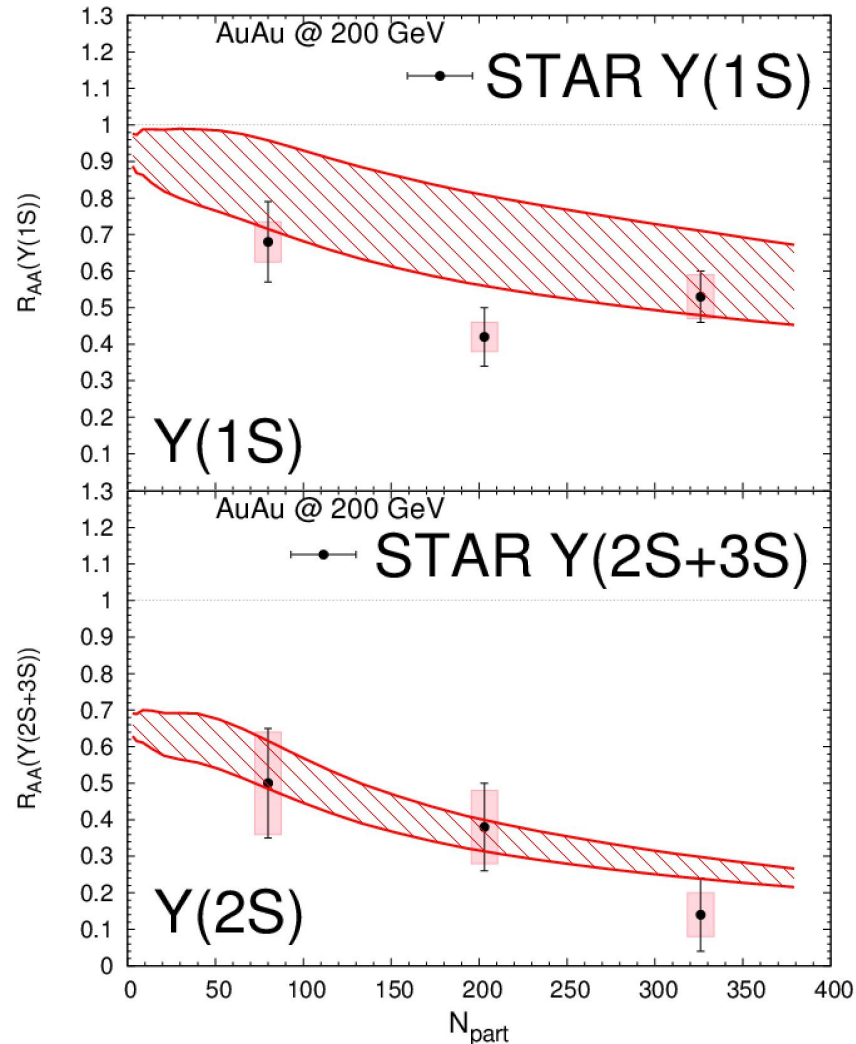
Kinetic Rate Equation Approach

$$\frac{dN_Y(\tau)}{d\tau} = -\Gamma_Y(T(\tau)) [N_Y(\tau) - N_Y^{\text{eq}}(T(\tau))]$$

- Suppression and regeneration
- In-medium binding energies from T-matrix
- Quasi-free + gluo-dissociation reaction rates
- Thermal fireball with lattice QCD EoS
- p_T -spectra with p-dependent reaction rates and b-quark transport spectra for regeneration component



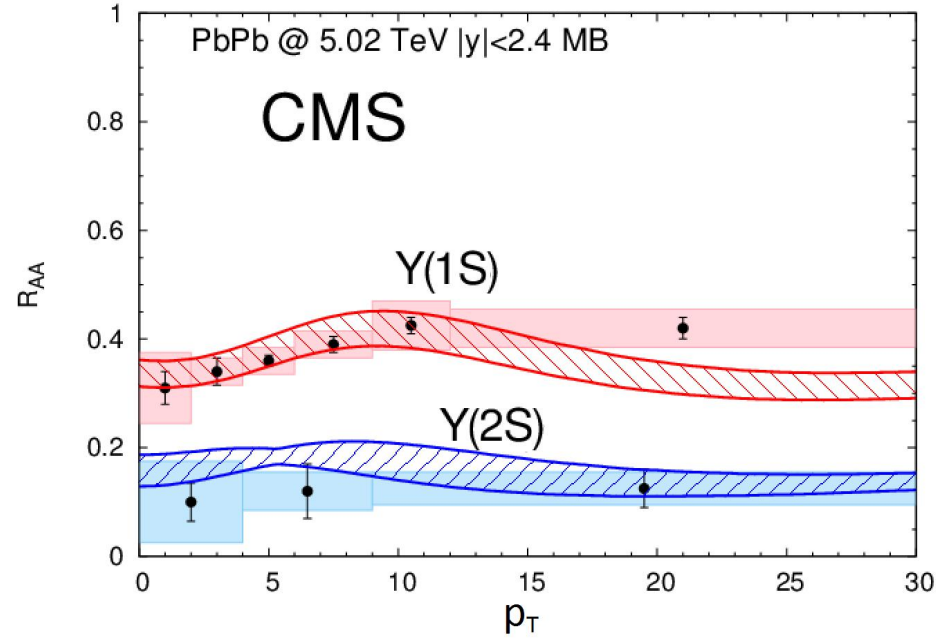
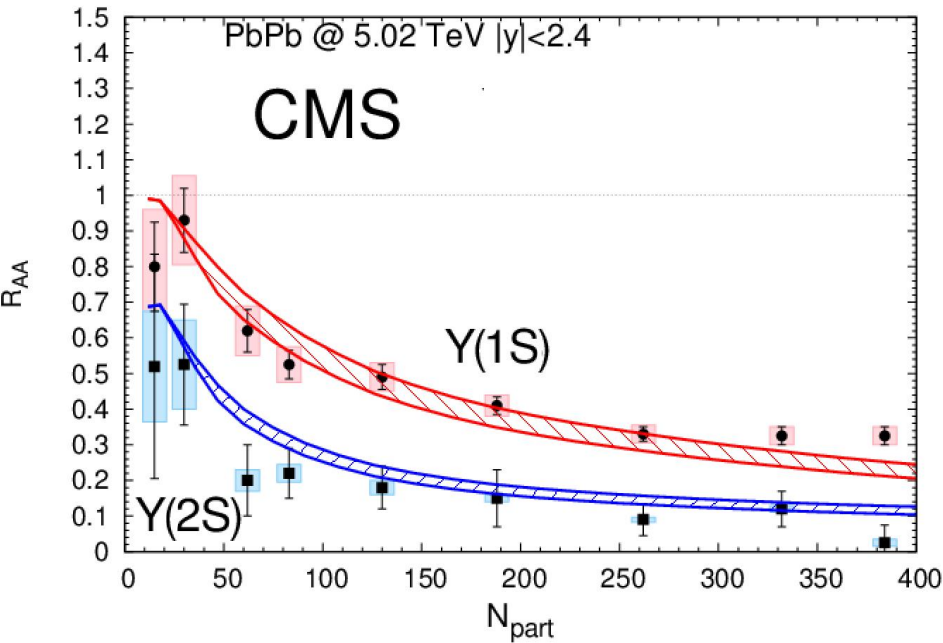
Comparison to newest RHIC data (QM17)



- Uncertainty band due to nuclear absorption of $\sigma_{YN} = 0-3$ mb
- Fair agreement with STAR data

YE, Zaochen [STAR]:Tues. Parallel 4 Regency C

Comparison to newest LHC data (QM17)



- Uncertainty band due to shadowing
- Coalescence from non-thermalized b-quarks induces moderate p_T -dependence

FLORES, Chad [CMS]:Tues. Parallel 4 Regency C
DAS, Indranil [ALICE]:Tues. Parallel 4 Regency C
G. Fronze [ALICE], Hard Probe 2016, to be published.