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Sequential melting of quarkonia in quark-gluon fluid at RHIC and LHC

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We study properties of the quark-gluon plasma from sequential melting of quarkonia in heavy ion collisions at RHIC and LHC. A quarkonium travels through the quark gluon fluid and dissociates when temperature is larger than dissociation temperature which varies among quarkonium species. Dynamics of the quark gluon fluid is described by relaticistic hydrodynamics with the latest equation of state from the lattice QCD simulations. Through comparison of our results with RHIC data, we constrain the dissociation temperature of J/psi. We also predict survival probability of quarkonia at high pT at LHC.

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