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Quarkonium in Medium and Transport in Heavy-Ion Collisions

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The transport and spectral properties of heavy quarkonia in hot QCD matter are a central ingredient to describe their observables in high-energy heavy-ion collisions. We review recent activity in evaluating these properties in a nonperturbative quantum many-body approach where the basic two-body interaction kernel is constrained by quantities that can be computed with good precision in thermal lattice QCD. We then give a brief overview of quarkonium transport approaches to heavy-ion collisions. Focusing on the semiclassical approach we discuss the current interpretation of charmonium and bottomonium observables at RHIC and the LHC, and also highlight recent applications to Bc mesons.

session

F. Heavy Flavor and Quarkonia

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