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Heavy-quark observables at RHIC from parton transport theory
DENES MOLNAR, Purdue Univ. and RIKEN/BNL Research Center — There are several indications that an opaque partonic medium is created in energetic Au+Au collisions ($\sqrt{s} \sim 100$ GeV/nucleon) at the Relativistic Heavy Ion Collider (RHIC). At the extreme densities of $\sim$ 10-100 times normal nuclear density reached even heavy-flavor hadrons are affected significantly. Results on heavy-quark observables will be presented based on the parton transport model MPC, focusing on the nuclear suppression pattern and the azimuthal anisotropy ("elliptic flow"). I will contrast the opacities extracted from light and heavy-flavor observables and will test whether both open and hidden heavy-flavor observables can be explained in the parton transport framework.

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