

APR06-2006-000518

Abstract for an Invited Paper
for the APR06 Meeting of
the American Physical Society

Lattice simulations of strongly interacting matter under extreme conditions

PETER PETRECZKY, BNL

I am going to review current status of lattice QCD at finite temperature and its implication on Quark Gluon Plasma search at RHIC, including the transition temperature, equation of state, mesonspectral functions. A special attention will be devoted to heavy quark potentials, quarkonia spectral functions, and heavy quark transport.