J$\Psi$ Suppression, A Signature for Deconfinement of Quarks

YAXING ZHANG, Stony Brook University — In high energy heavy ion collisions, it is important to identify a clear signature for the occurrence of a phase transition from hadronic matter to a quark-gluon plasma, QGP. The suppression of J$\Psi$ yield in heavy ion collisions is considered to be one of the main signals of a deconfined state of quarks and gluons. The talk will start with a brief introduction to the basic concept of QGP. Then the mechanism of J$\Psi$ by QGP formation is introduced. Finally, the experimental results from CERN-SPS and BNL-RHIC regarding J$\Psi$ suppression are presented.