J/Psi Suppression JOSEPH ANDRADE, Stony Brook University — In the last 30 years, collaborations at heavy-ion accelerator facilities have led to experiments further probing the unknown regions of the nuclear phase diagram. Most notably, these experiments found evidence supporting the existence of the state of matter known as Quark-Gluon Plasma (QGP) at high temperature and density. In particular, fewer J/Psi mesons are produced than would be predicted from summing independent nucleon collisions alone. The mechanism behind this suppression involves color screening to prevent binding of the charm quark and charm antiquark that constitute the J/Psi particle. This discovery provided substantial evidence in favor of the theorized QGP phase state. This talk will introduce the concept of QGP, and evidence for its existence will be discussed. The material will focus on analyses of recent data in support of QGP, as well as the theorized mechanism behind the J/Psi suppression.