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Abstract for an Invited Paper for the APR09 Meeting of the American Physical Society

Maria Goeppert Mayer Award Talk: High Transverse Momentum Probes at RHIC SASKIA MIODUSZEWSKI, Texas A&M University

The Relativistic Heavy-Ion Collider (RHIC) has been providing collisions of Au ions at ultra-relativistic energies since 2000. Nuclear physicists from around the world have been studying the matter created in these collisions. I will discuss the relevance of high transverse momentum particles as probes of this matter and what we have learned about the properties of the so-called "Quark Gluon Plasma." I will also discuss current efforts to refine our sensitivity to the properties of this matter and present recent results from such efforts.