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**Condensed matter approach to a partonic system - The energy scan at RHIC**

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Measurements at RHIC and the LHC show clear evidence for the creation of a short-lived color-deconfined phase in heavy ion collisions. The confinement of color charge due to the non-Abelian nature of Quantum Chromodynamics (QCD) is the hallmark of the Strong interaction. A deeper understanding of this defining feature is best explored by experimental studies at the natural scale of the theory. A major program at RHIC aims to explore the phase diagram of QCD matter by studying a comprehensive suite of observables while systematically varying the beam energy. Details of nontrivial structures in the phase diagram may shed light on the nature of deconfinement and symmetries of the theory. I will discuss the status of the energy scan program— what has been learned and what may yet be learned. I will also discuss several interesting analogies with an entirely different area of physics exploring phase structures in highly dynamic systems.