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## RHIC energy scan and the search for the critical point

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The QCD phase diagram of nuclear matter can be mapped onto the 2 dimensional space of temperature and baryon chemical potential. One of the key landmarks in this space is the Critical Point, which indicates the end point of an ordered phase transition from a hadron gas to a Quark Gluon Plasma (QGP) to that of a smooth transition or crossover. However, the exact location of the critical point, cannot yet be reliably calculated and must be sought for experimentally. Collisions of different beam energies result in different temperature and baryon chemical potential entry points providing us with the tools to probe a wide range of the phase diagram. A beam energy scan program has been initiated this year at RHIC to search for evidence of a critical point in QCD. Data was collected in Run-10 from Au-Au collisions at center of mass energies of 62.4, 39, 11.5, and 7.7 GeV per nucleon. The 7.7 GeV are the lowest ever collided at RHIC. The talk will briefly discuss and accelerator performances, but will mainly focus on the the results from this effort and future prospects.