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Abstract for an Invited Paper for the APR15 Meeting of the American Physical Society

Herman Feshbach Prize in Theoretical Nuclear Physics Talk: Matter at High Energy Density and Ultra-relativistic Nuclear Collisions LARRY MCLERRAN, Brookhaven National Lab., China Central Normal University

At energy densities greater than those of atomic nuclei, various forms of matter made from quarks and gluons are predicted by the theory of strong interactions. Such matter may be studied in the high energy collisions of strongly interacting particles. I qualitatively discuss the properties of this high energy density matter, and describe how such matter is seen in the collisions of high energy strongly interacting particles.