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Sommario/riassunto	Recent scientific and technical advances have made it possible to create matter in the laboratory under conditions relevant to astrophysical systems such as supernovae and black holes. These advances will also benefit inertial confinement fusion research and the nation (TM)s

nuclear weapon (TM)s program. The report describes the major research facilities on which such high energy density conditions can be achieved and lists a number of key scientific questions about high energy density physics that can be addressed by this research. Several recommendations are presented that would facilitate the development of a comprehensive strategy for realizing these research opportunities.

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