Beta $> 1$ Penning Discharge Fusion Device

ROBERT JONES — A cold target (fibre(s) or dust, R. Jones, Ind. J. Phys, 55B, 397, 1981 and Ind. J. Phys, 57B, 378, 1983) is heated by high voltage (Megavolt) pulsed power in Penning geometry. The plasma is thermalized by nonclassical processes and electron space charge ion heating (R. Jones, Il Nuovo Cimento, 40B, #2, 261, 1977) and heat is confined by both electrostatic and magnetic insulation while plasma pressure is supported by (wall) inertia (beta $> 1$). (R. Jones, BAPS, 37, #6, 1474, 1992) More effort needs to be devoted (worldwide) to the study of wall confined plasmas.

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