

Ignition of a Thermonuclear Detonation Wave in the Focus of Two Magnetically Insulated Transmission Lines

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For the ignition of a thermonuclear detonation wave assisted by a strong magnetic field, it is proposed to use two concentrically nested magnetically insulated transmission lines, the inner one transmitting a high- voltage lower-current-, and the outer one a high-current lower-voltage- electromagnetic pulse drawn from two Marx generators. The concept has the potential of large thermonuclear gains with an input energy conceivably as small as 10^5 J.

Key words: Nuclear Fusion; Fast Ignition.