EVOLUTION OF THE DIAGNOSTICS USED AT THE CESAR FACILITY

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Cesar is a 2 Ω generator which produces a 300 kA, 600 kV, 65 ns pulsed electron beam. When the electron beam hits a target, a very fast energy pulse is deposited. We have used different diagnostics to measure the target impulse, its back surface motion, and the pressure wave. They allow us to describe the behavior of the target in order to deduce the Equation of State (EOS) of the material under analysis.
In this paper, we present the latest results we have obtained to study the beam target interaction. In particular, measurements of the choke wave with a new four channels Photonic Doppler Velocimeter are presented.
