

(Electron) energy confinement time at the tokamak GOLEM

The energy confinement time is defined as a function of the global plasma energy content W_p , and the applied total heating power P :

$$\tau_E = \frac{W_p}{P - dW_p/dt}$$

Choosing the quasistationary phase of the plasma discharge, where $\frac{dW_p}{dt} = 0$ gives:

$$\tau_E(t) = \frac{W_p(t)}{P(t)}$$