Long Pulse HHFW only H-modes

J.R. Wilson

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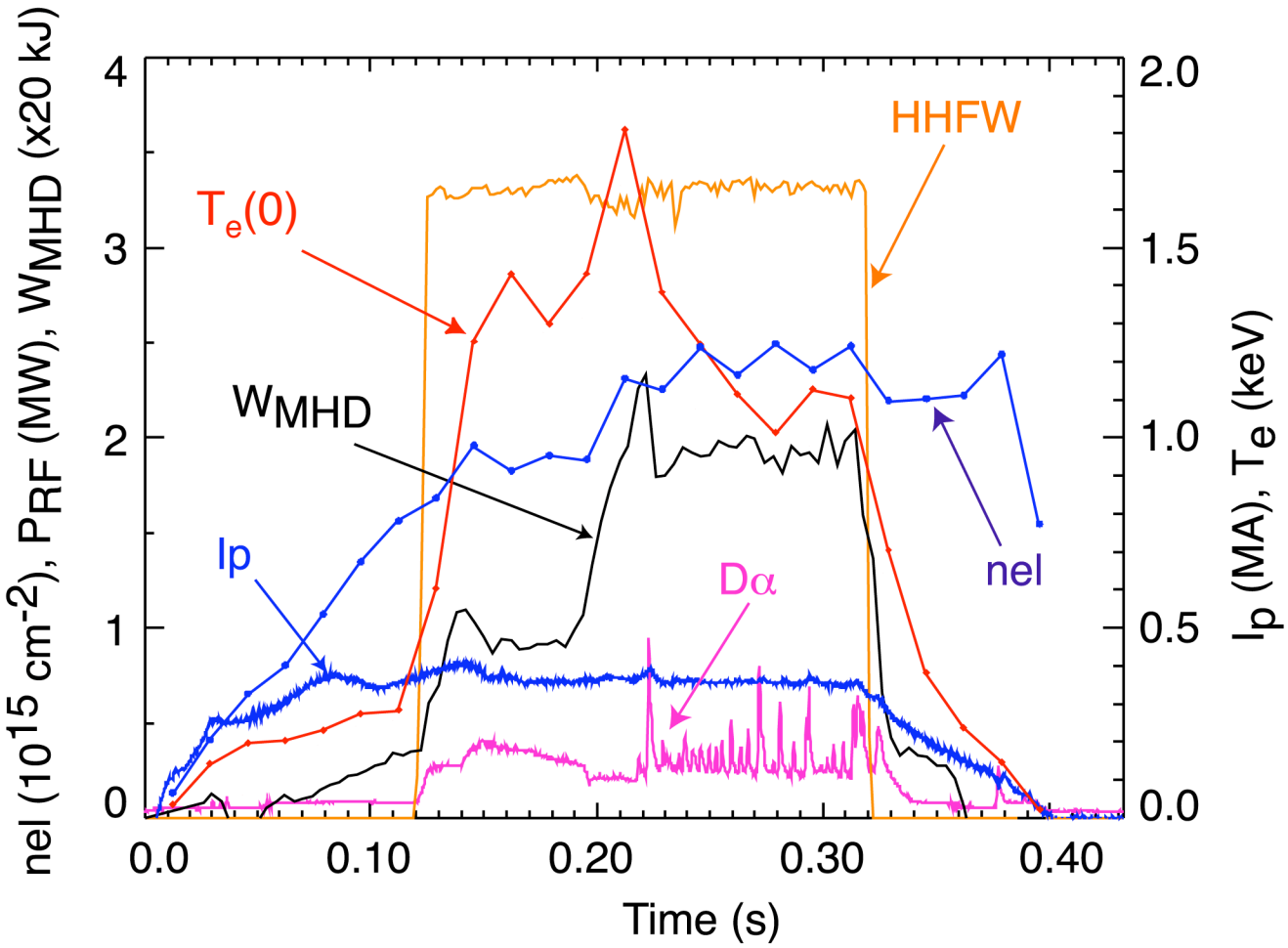
Create long pulse HHFW only discharge

- HHFW Steady H-mode has been achieved
  - Heating mode
  - $f_{BS} \sim 0.4\text{-}0.5$
  - Ended when rf turned off
- Use CD phasing and try for maximum pulse length
  - Scan power, ne, B, Ip to maximize non inductive current fraction

High beta poloidal H-mode plasmas provide excellent target for long pulse sustainment



$\beta_p = 1$

$I_{BS}/I_P = 0.4$

q(0) rises

ℓ_i drops

$k_T = \pm 14\ m^{-1}$