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The dependence of the power threshold on drsep and X-point height

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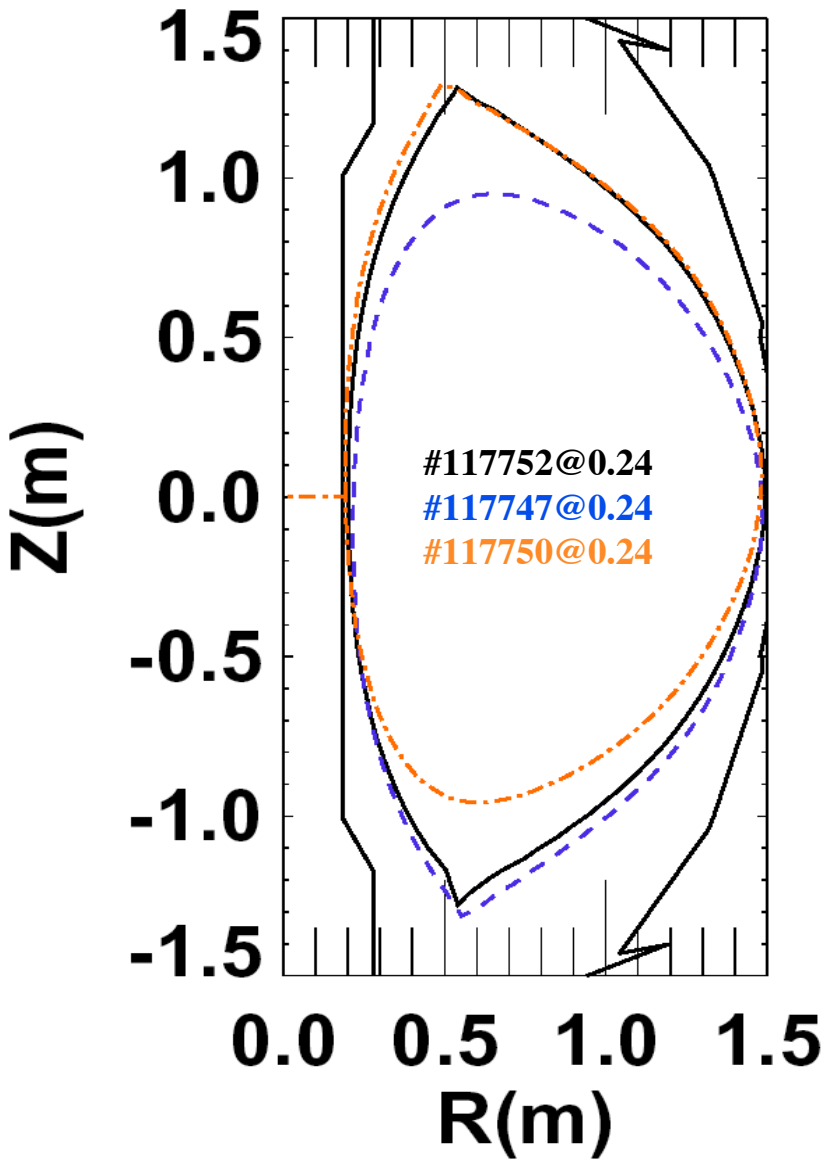
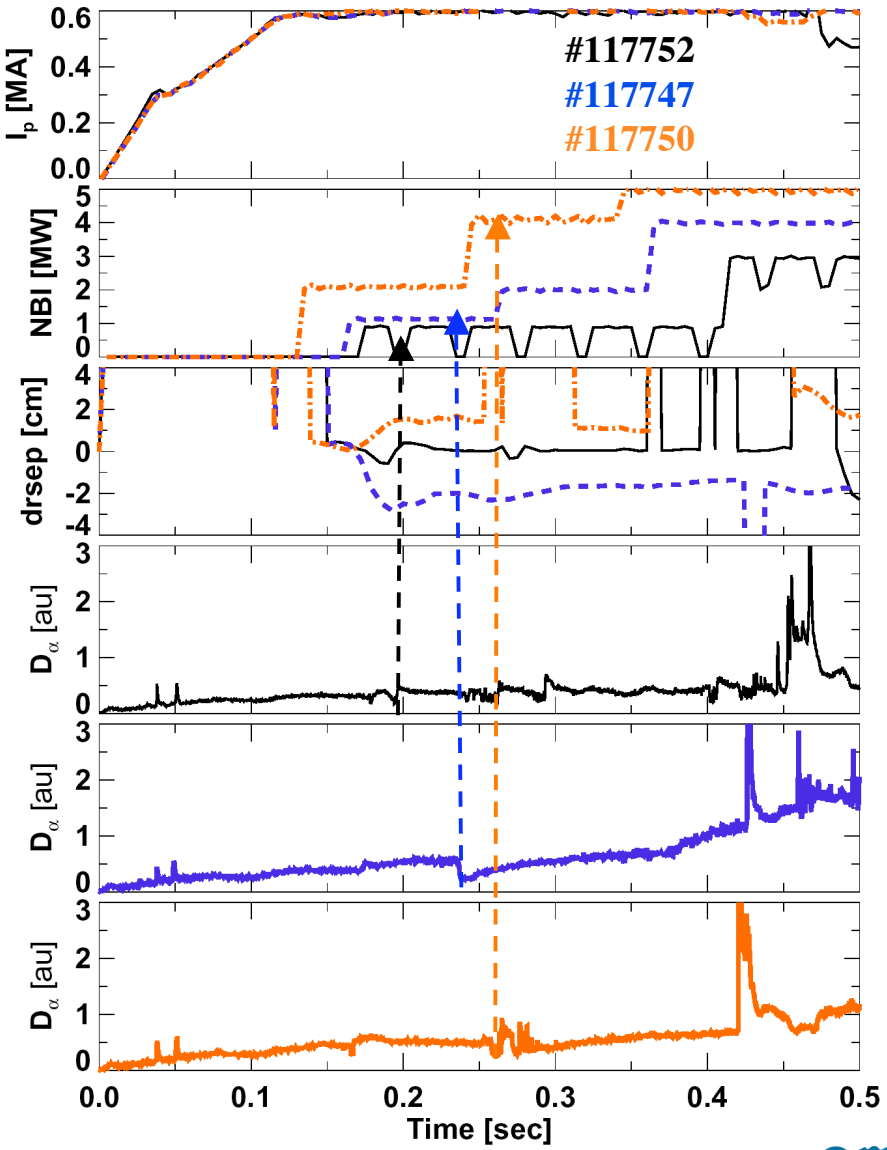
NSTX PhysicsMeeting
Aug. 29, 2005
Princeton, NJ

Summary: P_{LH} was lower in DN than in LSN and USN for all NBI and RF heated cases that were measured

- NBI power threshold for I_p=600 kA, B_t=0.45 T
  - DN #117752 $\leq$ 0.6 MW: κ=2.0, δ_l=0.47, δ_u=0.49, Δ_r^{sep}=0.0
  - LSN#117747 $\leq$ 1.1 MW: κ=1.76, δ_l=0.52, δ_u=0.35, Δ_r^{sep}=-2.0
  - USN#117750 $\leq$ 4 MW: κ=1.72, δ_l=0.35, δ_u=0.55, Δ_r^{sep}=1.4 (USN H-mode for first time ?! with large Δ_r^{sep})
- RF power threshold for I_p=600 kA, B_t=0.45 T
  - DN#117767/#117776 $\leq$ 0.6-1.1MW (Δ_r^{sep}=0.0cm)
  - LSN#117777 $\leq$ 1.7MW (Δ_r^{sep}=-0.5cm)
  - LSN#117782 $\leq$ 2.7 MW (Δ_r^{sep}=-1.8cm)
- Ohmic H-mode obtained for I_p=900 kA, B_t=0.45 T in LSN#117754 and DN#117756(USN not attempted) with κ=2.0, 2.1, δ_l=0.40,0.38, δ_u=0.32,0.38, Δ_r^{sep}=-2.4, 0.0 cm

P_{LH} lowest in balanced DN with drsep~0 w/NBI heating





P_{LH} increased with decreasing drsep with RF heating