EX/P3-41: Achievement of Field-Reversed Configuration Plasma Sustainment via 10 MW Neutral-Beam Injection on the C-2U Device

- C-2U device was upgraded from C-2 with 6 brand new NB injectors (15 keV hydrogen), total injected power up to ~10+ MW
- Advanced beam-driven FRC state has been produced via ~10 MW NBI
- Key FRC plasma parameters (e.g. radius & T_e) ware sustained for ~5+ ms; diamagnetism reached up to 11 ms, twice as long as C-2
- Dramatic improvements in transport and confinement properties

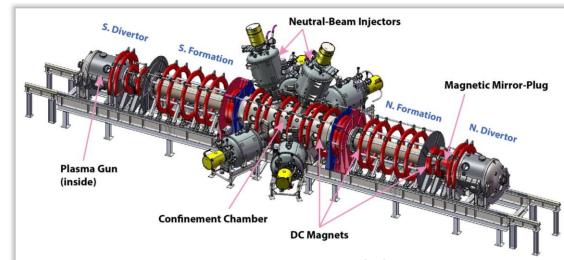


Fig. 1. C-2U Device at Tri Alpha Energy

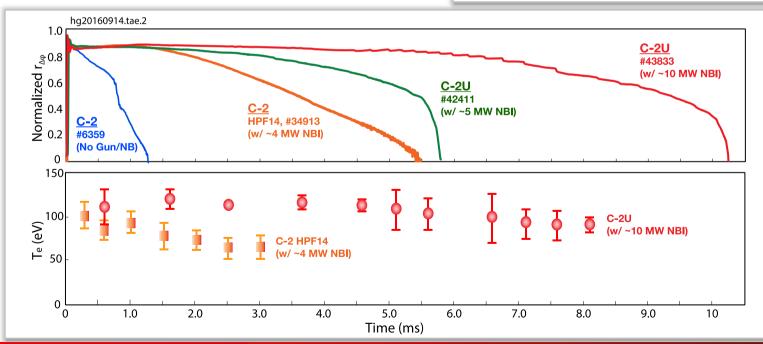


Fig. 2.
Time evolutions of normalized plasma radius & electron temperature in C-2 / C-2U experiments