EAST Steady-state Long Pulse H-mode with Core-edge Integration for CFETR

A Minute Time Scale SS High-$\beta_p$ Discharge Was Achieved with W-Divertor

- Dominant electron heating by EC & LH
  - $\beta_p \sim 2.1$, $\beta_N \sim 1.7$, $H_{98,y2} \sim 1.3$, $f_{BS} \sim 50$
  - e-ITB ($T_e > T_i$), zero torque, low rotation
- Confinement improvement
  - Broader q-profile and Shafranov shift
- Good control of particle
  - Small ELMy, on-axis ECH
- Radiation FB control compatible with core performance

X. Gong, et al., IAEA-CN-286/EX/1-TH/1