

High-Temperature Plasma Regime has been extended successfully in Helical System

- **Simultaneous high T_i and high T_e regime was successfully extended** in the LHD due to the establishment of the i-ITB and e-ITB simultaneously by the optimized heating of NBI and ECRH mix.
- Although the ion thermal confinement was degraded in the plasma core with increase of T_e/T_i by the “**on-axis ECRH**” superposition, it was found that **the ion thermal confinement was found to be improved at the “edge”**.
- It was found that the structure of the n_e fluctuation at the “**edge**” was clearly modified by “**on-axis ECRH**”.

