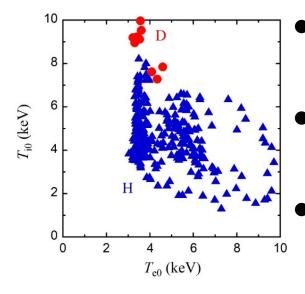
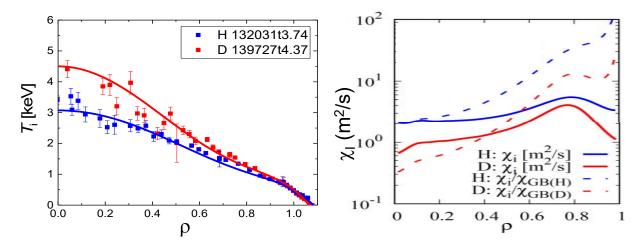
## T. Morisaki Overview of the First Deuterium Experiment in LHD (2002)



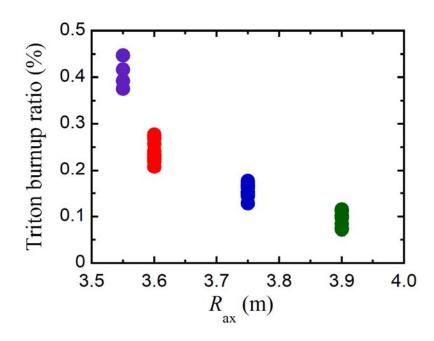
## LHD extended its operational regime with D plasma



- Fusion-relevant  $T_i = 10 \text{ keV}$ was first achieved in stellarator/heliotron
- Ion thermal diffusivity was found to be small in D plasma with ITB
- Similar improvement was observed in ECH plasma
- => Observation of clear isotope effect in stellarator/heliotron



## Energetic ions are well confined in heliotron configuration



- Triton burn up experiment with newly installed neutron diagnostics proved the good performance of energetic particle confinement,
- which are comparable to tokamak with similar plasma cross section as LHD