

Core particle transport codes are benchmarked with the goal of

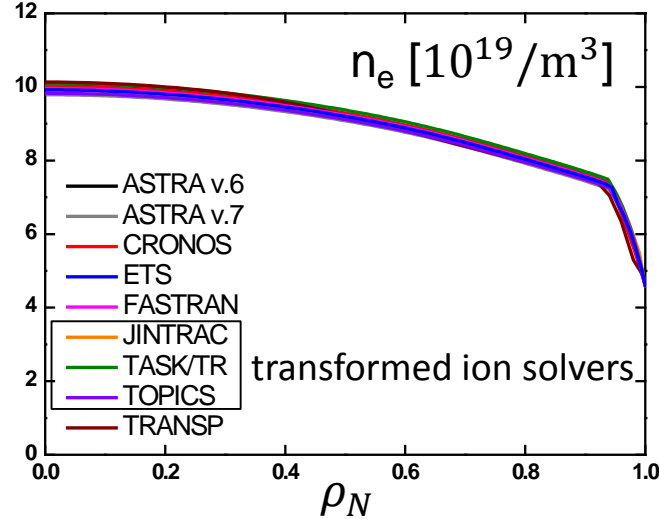
- to identify the differences in treatment of particle transport between codes in conditions close to those expected in ITER
- to reveal the relevant critical issues of ITER to be clarified in dedicated modelling and experiments on present machines
- to predict particle transport more accurately

We are now in phase 1 where

- definitions are unified between codes
- particle transport solvers and pellet fuelling modules are benchmarked with the same transport coefficients, source, and BC in flattop phase of ITER baseline scenario.

1. Electron transport benchmark

- Electron solvers and ion solvers transformed for direct comparison are benchmarked.



2. Pellet fuelling module benchmark

- ASTRA+SMART, JINTRAC+HPI2 are employed.
- Pellet volume, injection side, pedestal and separatrix parameters are scanned.

