

Simulation Study of Plasma Boundary in Thailand Future Tokamak using Two-Points Model

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As Thailand has been preparing to operate a small tokamak, the quantitative information about the plasma in the edge and at the material surface would be insightful for future experimental operation. In this work, we numerically investigate the particle and heat exhausted from the core plasma to the limiter by employing a simple two-points model. It is found that the electron temperature at the limiter surface is in the range of 1-100 eV depending on the particle and heat fluxes from the core. Furthermore the conditions for the plasma detachment are also explored.

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