Kinetic Modeling of Classical and Neo-Classical Transport for High-*Z* Impurities in Fusion SOL/Divertor Plasmas using Binary Collision Method

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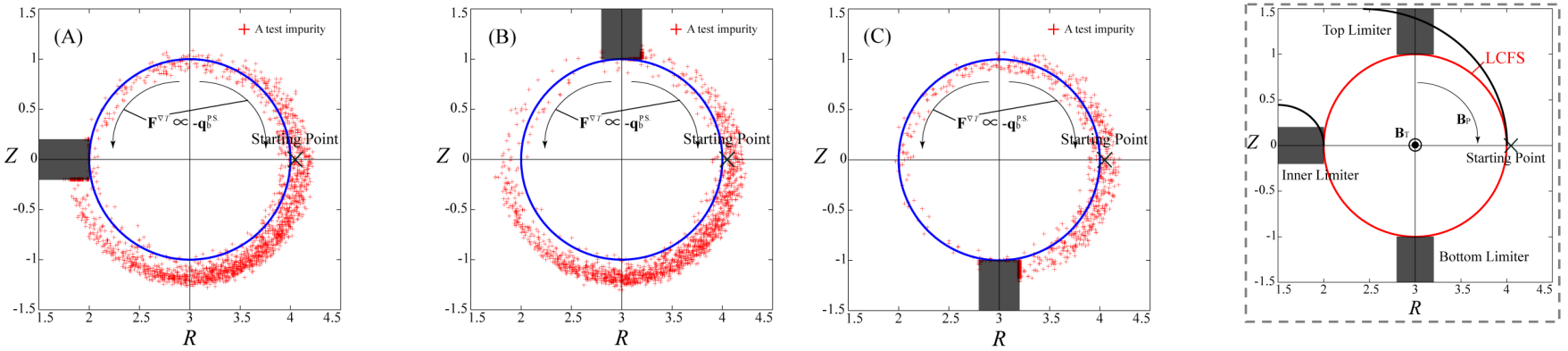
- New Kinetic Simulation model for Neoclassical Impurity Transport
(Outward Temperature Screening Effect / Inward Pinch => Accumulation/Exclusion of Impurities in Core, etc…)

- Radial Transport of Impurities in Open **B**-field configuration of Torus Plasma, is Significantly Affected according to Limiter Position.

(In some cases, e.g. (A), (B) below, the impurity transport obeyed the neoclassical theory even in the open **B**-field…)

NC TSE : Neoclassical Outward Flow with (A) Inner / (B) Top / (C) Bottom Limiter



NC TSE is Generated by Radial Temperature Gradient Of background Plasma $\nabla_{\perp} T_i$