

## **Stochastic tokamak**

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The concept of the stochastic tokamak with the area of the ergodic magnetic field in the plasma center surrounded by nested magnetic surfaces is suggested. According to the force balance equation, the plasma pressure appears to be constant everywhere in the ergodic region that results in a force-free equilibrium, having some known advantages, e.g., the absence of many drift and current instabilities. The general Hamiltonian approach is used to demonstrate a possibility of the realization of such magnetic configuration. The 3D-calculations of the drift trajectories of charged particles in the stochastic tokamak are performed and analyzed.