

ITER energetic particle confinement in the presence of ELM control coils and European TBMs

- Using ASCOT, 3.5 MeV alphas and 1 MeV NBI deuterons were simulated in the 15MA H-mode flat top phase including
 - a recent 3D-wall,
 - ferromagnetic components with detailed geometry and nonlinear $H(B)$ curves, as well as
 - ELM Control Coils
- No threat to first wall from NBI ions or α -particles was observed due to
 - European Helium Cooled Pebble Bed TBMs,
 - ELM Control Coils at 18kAt current (field stochasticity limited to outside $\psi_p=0.95$), or
 - combination of the above perturbations.

