The combined effect of neoclassical tearing modes and ELM control coils on fast-ions: validation in AUG and extrapolation for ITER

- Improved statistics of synthetic FILD simulations by an order of magnitude
- Simulated and compared FILD signal due to NBI losses caused by the (3,2) NTM and RMP fields in AUG
- Simulated alpha losses due to (3,2) and (2,1) NTMs and ECC fields in ITER
- · Alpha losses increased by 100% but stayed within the engineering limits assuming realistic island width