Applying same process physics allows predictions of co-deposition in ITER 1022

WallDYN is able to reproduce local and global experimental results

Including C in ITER increases codeposition by factor 10 to 100

Be deposition pattern in JET-ILW

Quantitative match of global fuel retention

in JET:

EX/P5-32

- \rightarrow Only 100 to 700 full 400s discharges
- Calculations show that even at similar total wall fluxes retention scatters by factor 10
- \rightarrow There's more to it than a simple flux scaling
- For current material choice (Be main wall, full W divertor) Co-deposition will not hinder ITER operations

⊞ retention rate (D/s) ~00.5 +/- 0. 1021 H-Mode Be+W 1020 JET Long term Ohmic 1019 C-JET Exp. WallDYN C-JET ITFR Be+W JET-ILW Exp. ITER Full C WallDYN JET-ILW 1018





Predictive significance for ITER

