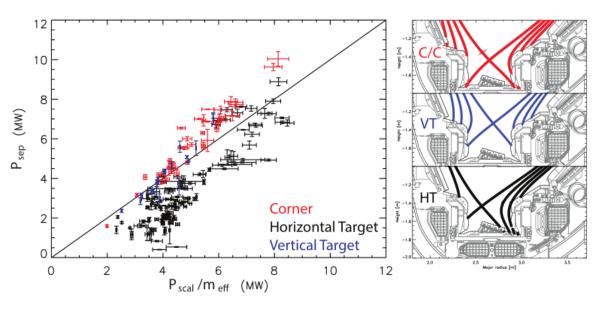
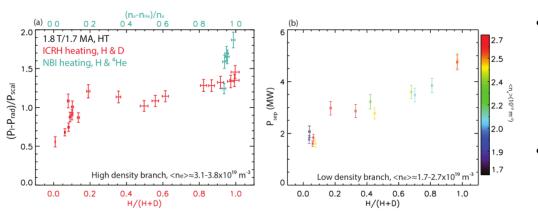
## Implications of JET-ILW L-H Transitions studies for ITER



- Strong divertor configuration effect is largest uncertainty for extrapolating L-H threshold power for ITER
- Density minimum depends on isotope, ~30% higher in hydrogen





- Non-linear dependence of P<sub>LH</sub> in mixed species plasmas offers path to lower threshold in pre-fusion power phase of ITER operation, with H-He mixture
- Interpretive transport and ICRH power deposition calculations cannot explain dependence on basis of changes to ion and electron heat fluxes

J.C. Hillesheim | IAEA FEC | India | October 2018