H vs L

- The confinement issue is NOT ITER & FIRE vs IGNITOR , it is H vs L
- Applying the same H or L rules (power handling and pulse length aside), IGNITOR obtains equal or better performance Q than ITER & FIRE
- L mode (cold edge) 5 < Q < 10 in IGNITOR with peaked density profiles n(0)/<n> =1.8 requires 1.25 < H(L97) < 1.4. (E2 and P4 Snowmass working groups)
  - The Pellat Report refers to H(L97) 1.3 -1.6 for IGNITOR
  - Horton's published paper has H(L97) = 1.5 for IGNITOR
  - ITER (under the same peaking and cold egde L-mode conditions) requires 1.4-1.7
- L mode (cold edge with peak density) with H(L97) factors up to 1.4 have only been achieved transiently.
- The 1.5D theory based core transport models in standard use have obtained 5 < Q < 10 for IGNITOR only by assuming hot edges (2 KeV)
- Projected H -modes with hot pedestals in IGNITOR (9MA wall-separtrix) obtain 5 < Q < 10 but are likely limited by power handling.