- **Conceptual foundations of confinement are in a state of flux:**

  - **Pedestal physics serves as boundary condition for core transport**
  - **Core temperature profiles appear "stiff" .**

- **For projections concentrate on "wind tunnel" Demonstration Discharges**

  - **Insensitive to physics origins**

For operational space calculations the global IPB(y,2) scaling is extensively used

$$P_{loss} = \left(9.1 \cdot 10^{3}\ \mathrm{MW}\ \frac{n_{19}\, T_{10}^{2}\, a}{3.23 \qquad 0.61} \right) \left(\frac{T_{10}^{0.5}}{B\, a} \right)^{0.70} \left(\frac{n_{19}\, T_{10}}{2} \right)^{0.90} \left\{ \left(\frac{a\, B}{I} \right)^{3} e^{1.26}\, k^{0} \right.$$

  - **BUT, unfavorable β – scaling is misleading: Overpredicts IGNITOR;**

  - **Underpredicts high β experiments (NSTX)**

  - **Not found in direct scans on JET, DIII-D**

- **Redo operational space calculations to determine sensivity to scaling**

  A gyroBohm scaling relation has been fitted to the H-mode data base.

DEMONSTRATION DISCHARGE

- **Most reliable approach to project confinement performance; insensitive to domi**

- **Express physics in terms nondimensional units; Match gyroradius and collisionality**

  - **Maps ITER into discharges on JET, DIII-D,C-Mod**

- **Extrapolate in gyroradius only; Measure scaling by gyroradius scan**

  - **Profiles taken from experiment**

  - **Insenstive to physics origin**

- **Supports design choice for ITER**

- **Needs dedicated shots to establish a database of shots**