

## PRU Lectures (revised)

- i.) How to Form a Profile  $\leftrightarrow$  What is a Tokamak?
- ii.) Confinement Scelings: Pipes, Convection, Tokamaks
- iii.) PV, Drift Waves, Zonal Flows
- iv.) Mesoscopic: Avalanches, Spreading etc.
- v.) Physics of Nonlinear wave-Particle Interaction
- vi.) SOL Width and Heat Load



## Comments - EP stuff

→ Much of EP work is fancy dressing on simple ideas. Chen/Zouca review is example. There  $\nabla \cdot \mathbf{J} = 0$  becomes a 3 line torture. Not useful to go this route.

→ My strategy:

- Discuss basic Vlasov story - like book.
- Apply to  $B + B_{\text{reduced}}$  model of (AE) coherence.
- Some words about AE + DW simulations

→ Comments:

- Basic Vlasov renormalization illustrates multi-scale interaction in basic conceptual context.
- Avalanche idea is useful in EP.  
Hence EP section after mesoscopic.