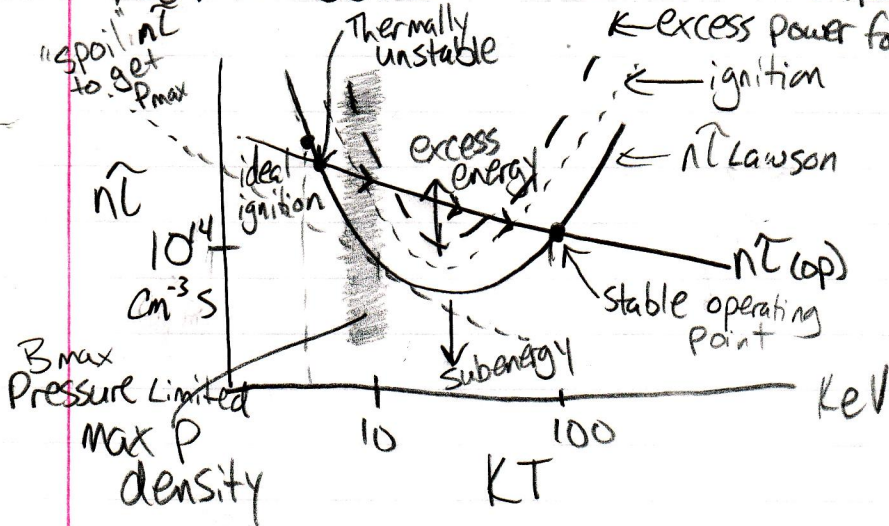


- 2nd Exam: April 13 in class
- Take Home problem: April 27 - due May 6
- No final

Reading

- 6.3 Global leakage
- 10.3 Toroidal particle trapping
- P158 Safety factor q.
- 4.5 ICF (Review)
- 9.3-9.5 mirror

Not in book: Global Leakage and operating regions



Energy Balance Lines (can derive)

We want to be on the line  
 Above  $\Rightarrow$  too much & it will heat up  
 Below  $\Rightarrow$  too little energy

$nT(op)$   
 operational line  
 Thermal stability

$$\beta = \frac{p}{2nKT}$$

$$P_{OT} = \frac{n^2 \langle \sigma v \rangle E_f}{4} \sim \frac{\langle \sigma v \rangle}{(KT)^2}$$