

2/18

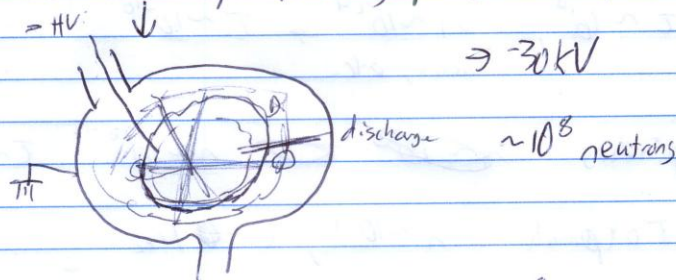
Ryun Young  
NPRE 421

- Assignment - 1) HW 5 [look at 1-3 before row next Tuesday, ~~25th~~ due Thursday 25th]
- 2) Start self review for Quiz Mar 2 -  
If needed, attend TA open time or 12PM Friday 26th in Conf. room in NEL

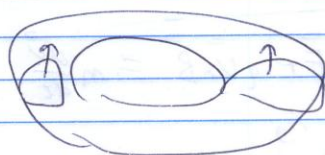
Quiz ~~book~~ open book, ~ 6 problems



3 experiments - IEC,  $\theta$  pinch, plasma wall

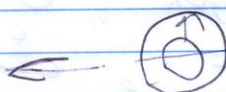
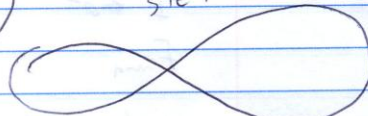


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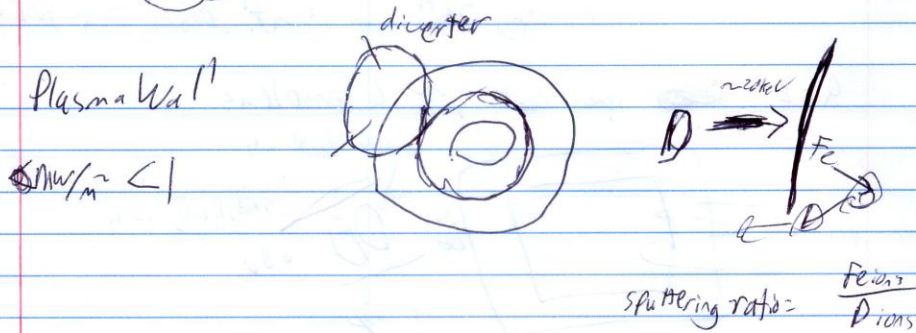
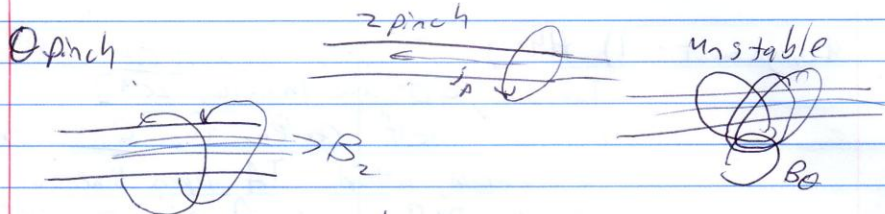


$\frac{q}{I} = \tau < 2 \mu s$

stellarator



PPPL



$n \sim 10^{14}$ ,  $n \sim 10^{24} \rightarrow \tau \sim 10^{-10}$   
lasers, etc.

pinches  $n \sim 10^{16-18}$ ,  $\tau \sim 10^{-2}$

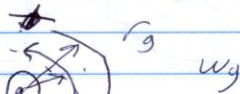
Tokamak  $n \sim 10^{14}$ ,  $\tau \sim 1 \text{ sec}$

" Pulsed Power "

$\vec{E} \leftarrow \vec{v}$

$F = m \vec{a}$

$F = q\vec{E} + q\vec{v} \times \vec{B} = m \frac{d\vec{v}}{dt}$



plasma  $\rightarrow$  diamagnetic

$B = \frac{\mu_0 I}{2\pi r}$

$B_{\text{plasma}}$  opposes  $B_0$

$E, B$  are external

