

Feb. 5

Wednesday, February 5, 2014
2:08 PM

Mark, Josh, Kabir, Chris, David, Jack

- * Frame - Josh check up with Jack.
 - now: finishing up B-field coil frame.
 - target mount/stand
 - alignment setup

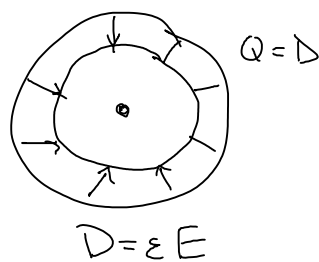
- * B-field
 - first fit to # windings / coil.

- * Target - Mark
 - PCB - Seppo, Mark, Diane
 - looking for alt. manufacturer
 - Avanti Electronics experience with material.
 - David: keep capacitance as low as possible.

$$C = Q/V$$

as $b \uparrow$ $V \downarrow$ $C \uparrow$

$$2\pi\epsilon_0 \ln R/r ?$$



$$2\pi s E = \lambda/\epsilon \quad V = \int_a^b E = \int_a^b \frac{\lambda}{2\pi\epsilon s} = \frac{\lambda}{2\pi\epsilon} \ln(b/a)$$

$$C/\ell = \lambda/V = \frac{2\pi\epsilon}{\ln(b/a)}$$

- * RFSE - Chris
 - posted 18 new drawings of Al shell on Wiki
 - still need drawings for twinax
 - Al cylinder manufacture underway.
 - should be done in 2 weeks

- need electrical measurements.
measured to 0.1Ω resistance - use 4-wire probe.
wants circuit measurements with 15 nF capacitor
- Seppo: start with the capacitor we have:
- David: need to measure resistance at 30 kHz due to skin depth.
- need to measure B field inside.
- Chris: measure all 3 components.

* Preamps:

- need to connect all 18 channels to eliminate cross-talk.
- 2 DAQs: problems
- Audio amp blew out - I'll order new one.

* Alignment

- David is designing the collimation.
- talking with 2 vendors:
one he bought original, the other the supplier
- \$600 each 4 jaws + 1 collimator = \$3000.
- need mechanical jaws.

