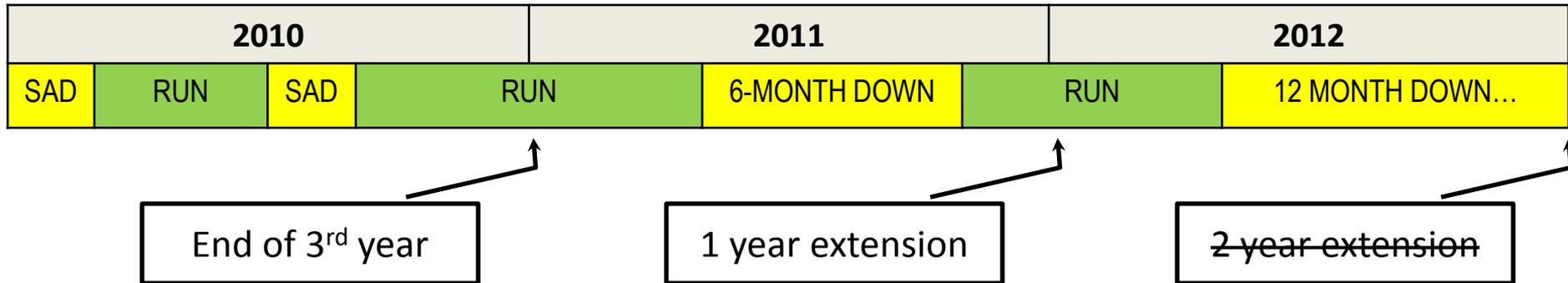


Which (PhD thesis) option to pursue...?



e- Energy	Experiment "Footprint"	Operation "Footprint"	Time "Footprint"
< 10 MeV	"Green" design @ OL02	10 MeV Segmentation	June-November, 2011
10-60 MeV	Modify 4D spectrometer	Full Injector	> November, 2011
1-3 GeV	Modify Hall B line	CEBAF to Hall B	> November, 2011

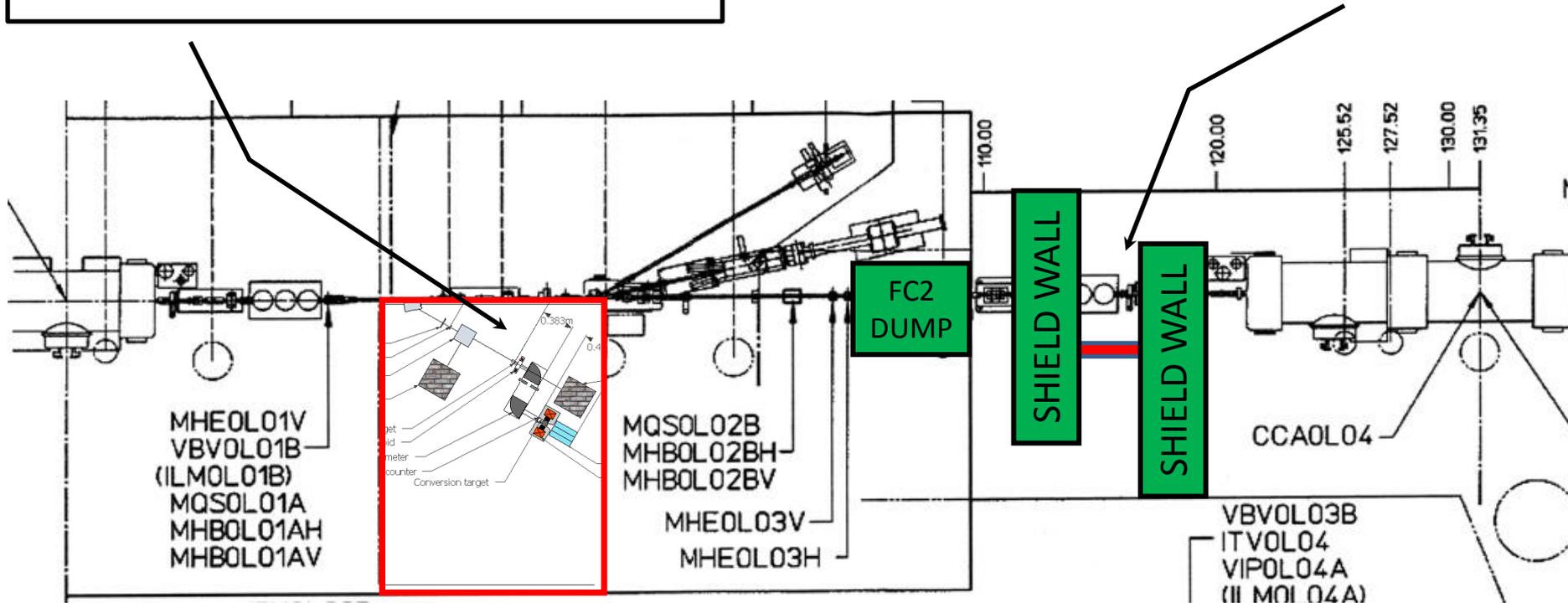
6 Month Shutdown : CEBAF Injector for 10 MeV Operations (or better yet a permanent capability...)

Polarized Positron Experiment

- Staged near Mott & spectrometer
- Footprint about 10' x 10' to scale
- Low Power <100 W (10 MeV X 10 uA)

6 Month Shutdown

- Remove differential pump & optics girders
- Install shield blocks with PSS egress
- Install 1-10 kW dump or reuse FCUP#2



Breakdown of Major Experiment Systems - Potential Responsibilities

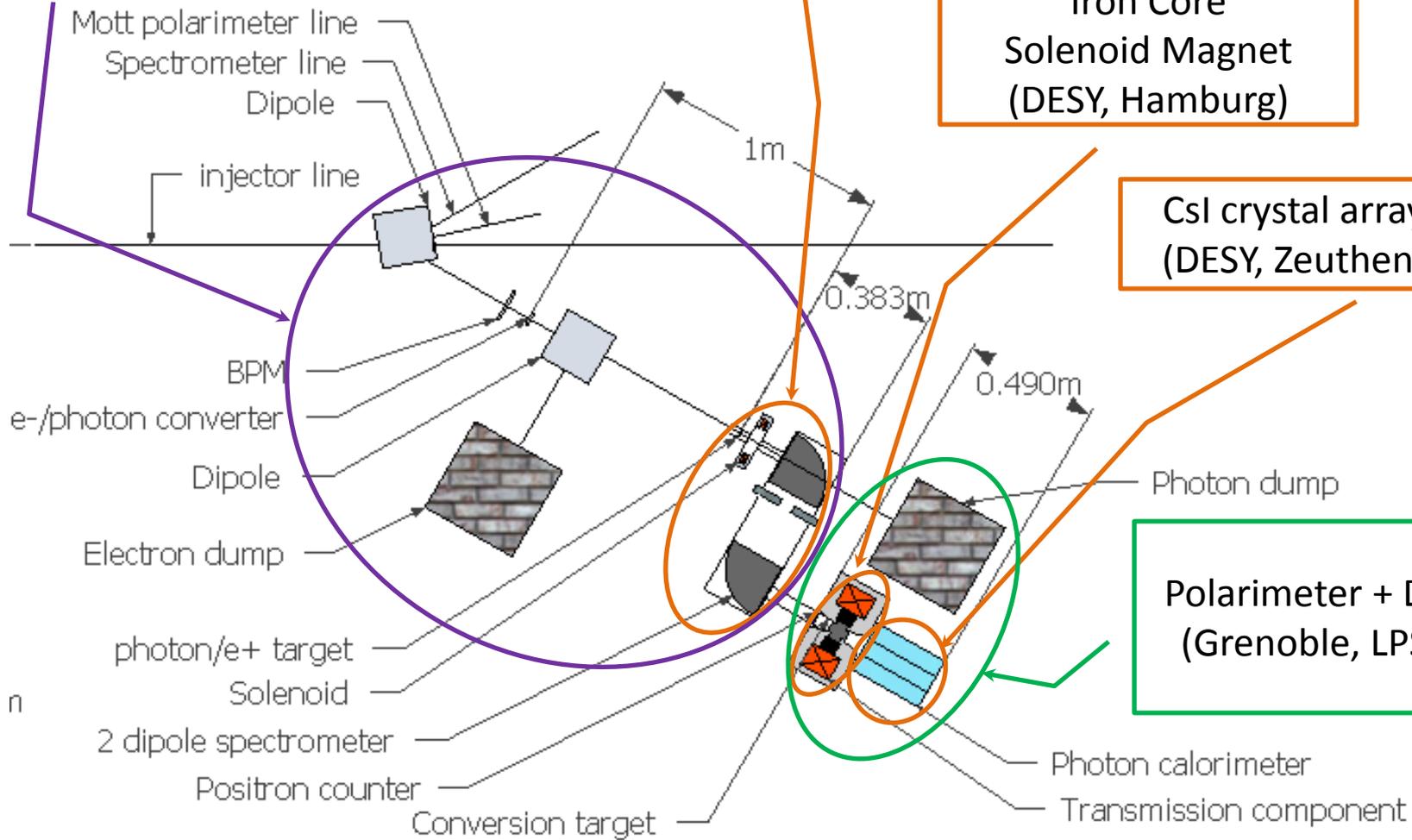
Vacuum chambers, targets, diagnostics, power supplies, controls (JLAB)

Focusing solenoid & spectrometer (Princeton U.)

Iron Core Solenoid Magnet (DESY, Hamburg)

CsI crystal array (DESY, Zeuthen)

Polarimeter + DAQ (Grenoble, LPSC)



2 Year Plan

- Complete experiment proposal letter with budget request
- Reach an agreement (CEBAF/Segmentation, E-166 collaboration, funding)

- LPSC loan polarimeter from DESY, begin testing crystal, assembling DAQ
- JLab loan solenoid/spectrometer from Princeton, make functional again, test

- Install electron "spigot" after cryo-unit
- Measurements and design work for segmentation begins

- Complete integrated design of experiment with full simulations (scattering chamber + targets, collection optics, dumps, detectors, shielding)
- Fabricate and test beam line components
- Fabricate segmentation
- Complete polarimeter & move to Jlab
- Prepare for installation of experiment
- Prepare some more...

- Build injector 10 MeV segmentation
- Install experiment
- Commission and run experiment
- Remove or recover from segmentation
- Commission injector ready for CEBAF

- Analyze experiment, defend thesis, publish results
- Figure out what's next...



Funding possibilities for next 2 years...

Where we have begged...

- LPSC - Scientist + PhD
- JLab - Scientist + PhD + ME (12 person-weeks)

Where we intend to beg...

- CNRS/IN2P3 - 150 k€ for polarimeter (mechanics, DAQ...)
- LPSC - Scientist, PhD, technical staff
- JLAB - \$150k for temporary segmentation & beam line, EGG/ME/EES/OPS
- DESY for polarized target and CsI crystal
- Princeton U. - solenoid and spectrometer magnets

How else we might subsidize our begging...

- Join ILC Positron Working Group
- JSA Initiative request in July 2010, awards in FY11
- DOE Early Career Scientist Grant 5 year, awards early 2010
- Idaho Accelerator Center recent award + joint JLab position