

Materials and PFCs Topical Science Group
5-year plan update (9/17/12)
MA Jaworski

Present status and time-line

- Organizational structure:
 - Chapter head: Jaworski
 - Subsection heads: Jaworski or Skinner
 - Contributors (feedback from more than half)
- Subsection heads will by mid-October (post IAEA) flesh out for contributors
 - Who contributes...
 - What topical (i.e. please write on question X for me)
 - How much to write (e.g. 1 paragraph, 1 page, etc)
- Contributions due post-APS
- Chapter draft ready mid-November

Component Exposure Probe

VS.

Liquid metal divertor segment

- CEP – pros
 - Interchangeable head
 - Study high-Z PFCs and active cooling
 - Diagnostic platform
 - Removable
- CEP -cons
 - Not a divertor target, not a divertor plasma
 - Less (conventional) coverage
 - Will not demonstrate divertor-PMI on liquid target
- LM divertor seg. - pros
 - Temperature controllable LM target, e.g. (cont. vapor shielding vs. Temp)
 - Divertor Li source more relevant to migration studies
 - Closest relevancy to LLD experience – (e.g. demonstrate achievement of “clean” conditions)
- Cons
 - Not removable
 - Still not full coverage of divertor floor and experimental interpretations may be more complicated