1.       You only give a motivation for polytope grids, not high order even though high-order is also in the title

2.       Is the albedo BC integrated over 4pi ?

3.       Slide 4: no need to talk much about MG S. your sigma\_s and P\_p, when expressed with mu should be mu\_0, not just mu. Also, the title of that block (Sn discretization) is not related to the contents of that block…

4.       Classic source iteration: second eq: re-use psi, do not copy the entire solution procedure to get psi. then the 3rd eq is not needed.

5.       I do not like myriad

6.       Your transition element picture clearly shows that you only need quads and triangles, where’s the polytope need there?

7.       The IM1 picture barely shows any polygons. Either you have to talk and show stuff on that picture during the prelim or pick a better picture

8.       Slide 9: the lambda’s are not defined anywhere. You should not expect committee members to know exactly how lambda are computed on a triangle. Then you need to make the step from triangle to polygon, no? Some definitions come in the next slides but the progression may be awkward. May a brief review slide on a triangle would be useful.

9.       Wachspress: What are the conditions for the denominator to be =0? That can clearly happen and cause trouble.

10.   Pwl: ti: standard linear basis function for triangle (i,i+1,c). be clear. Say what N\_V is…

11.   Mean value: can the deno be =0? Justify.

12.   ME: not enough explanation on argmin and how F is obtained. The dominos are not falling. The committee will not understand.

13.   Slide 16: the sets V, E, D are not defined…

14.   Slide 17: you haven’t prepared the reader for what \xi is. On slide 15, you have a double index ij for \xi. What is [\xi] on slide 17? A vector? You need to prepare them with a clear definition of your notation.

15.   Why do we talk about DSA? You haven’t motivated DSA (or massively // transport solves) in your intro. So it feels like we jump to a different topic but if you foreshadow this in the intro, the transition is smoother

16.   The shift from SIP (diffusion) to MIP (DSA) is not explained. Maybe this is meant to go in the empty theory slides. Nonetheless, diffusion as a solver versus diffusion as an accelerator needs to be explained and stated.

17.   Slide 26: I’d say we need to run reactor cores as well. Either C5G7 or C5G70 or C5G7infinity

18.   Slide 28: I cannot distinguish some of the curves. There are 7 items in the legend (in addition to the reference slopes) and I can only see 4 curves. What is S2? Is the Wachspress order 1 or 2, unclear?

19.   Same remarks on slide 28

20.   Slide 30: ME1 seems to have the largest error constant. It would be interesting to see of MV2 or PWL2 beat ME2 as well.

21.   AMR: refinement criterion is not given.

22.   What new info is given in slide 31?

23.   Rather than ongoing work, I would summarize (list) the goals are stated in the proposal and maybe use 3 colors: done, ongoing, not yet started (or 2 colors).