First Thoughts on ML Emittance Preservation Plenary at Vancouver

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GDE meeting

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Several Areas to Address:

- Summarize recent work on LET. It has progressed on several different issues:
  - ★ Benchmarking/crosschecking with DFS
    - ✳ I can show significant progress here
  - ★ Results with curved linac studies (KEK and Fermilab group results)
  - ★ Dispersion bumps (CERN and Fermilab results, anyone else?)
  - ★ Use bunch compressor to align main linac launch region (CERN, Fermilab?)
  - ★ Dynamic studies (who's doing this and what progress has been made?)
  - ★ Any other static studies performed recently (who and what?). Has anyone done anything lately with KM or BA?

Future work to mention:

- I suppose what will be mentioned here will be decided during the parallel sessions
- Continue benchmarking with other BBA algorithms (KM and BA).
- Static studies are rather well progressed but more work should be done with non-DFS methods (we want at the very least two working BBA algorithms)
- What about investigating other BBA algorithms, like Adaptive Alignment by V. Balakin?
- Ramp up work on dynamic studies
- And integrate emittance preservation studies with other areas (DR to IP)
- Insert e+ undulator in ML lattice

Call for Slides

- Those who have worked on main linac emittance preservation, please provide me with several slides summarizing your current results and future plans. Especially if you do not plan on attending the Vancouver meeting. (my email: js344@lepp.cornell.edu)
- No need to be refined, I'll be modifying and integrating them into a coherent talk anyway.