

Beam Dynamics Session

Date: Tuesday 8:30 am to 12:30 pm

Objectives:

Emphasize planning for the upcoming year; minimize "progress report" aspect of presentations, since this material will be in the written progress reports anyway.

Also, identify needs and suggest opportunities to collaborate with others throughout ComPASS

Also, identify any departures from the original proposal (if any) and explain why
Presentations via webex or telecon OK. But it is important that people on the phone participate for the entire 4 hr session, and phone into any other session where there is cross-cutting between BD/EM/AA.

Speakers should allow a few minutes for discussion at the end of their talks. Note that, in addition, there will be 45 min remaining at the end of the session for further discussion.

Presentations should include plans for both code development and applications.

Speakers/titles:

8:30-8:50, Jim Amundson and Alex Macridin: Synergia updates, plans and applications

8:50-9:05, Stephan Muszala: Plans and opportunities involving BD components

9:05-9:30, Paul Lebrun, VORPAL e-cloud modeling I; Seth Veitzer, VORPAL e-cloud modeling II

9:30-9:45, Jean-Luc Vay: plans for algorithm development including boosted frames for e-cloud

9:45-10:00, Wolfram Fischer (via telephone): Plans/needs from BNL (eRHIC design, e-cooling, ...)

10:00-10:15, Balsa Terzic : Plans/needs from JLab (ELIC design, e-cooling...)

10:15-10:30, Ji Qiang (via telephone): IMPACT and BeamBeam3D; plans and applications

10:30-10:45 Break

10:45-11:00, Robert Ryne: ML/I plans and applications; plans for multi-level parallelism

11:00-11:15, David Bruhwiler: e-cooling modeling plans

11:15-11:25, Dan Abell: opportunities for continued collaboration (rf cavity modeling; FFAG modeling)

11:25-11:35, Andreas Kabel (via telephone): Beam-Beam Simulations With and Without GPUs -
- Status and Plans

11:35-11:45, Sveta Shasharina, Plans and opportunities involving VizSchema and FastBit

11:45-12:30 Discussion

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