# Minutes of the EUROTeV Phone Meeting

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Participants: *Ph. Bambade, G. Blair, H. Burkhardt, P. Burrows, A. Faus-Golfe, A. Ferrari, A. Latina, O. Napoly, M. Pedrozzi, D. Schulte F. Stulle, R. Tomas*

**First meeting** after the summer. (ILC kept all busy). Daniel said that is important to update and write a report soon. The document will have probably to be delivered to the GDE in two weeks. We go around the tasks.

- FMSIM: Nick has no new slides on the web to show. The current status is that we shall list the possible failure modes, select which ones must be simulated and how.

- COLSIM: Graham is reporting from a meeting in Daresbury. Frank will review the slides on the web on behalf of him. Daniel asks which is the status of the collision system. The two tracking codes Merlin and STRUCT should be compared. It should be also found out whether STRUCT has an interface to GEANT or not. We go through the slides.

  Daniel points out that in the document the code R&D should be separated from the other tasks.

- LAST: Philip reports from the last LAST meeting at DESY (September 27th). Everybody is invited to see the slides of that meeting.

  He points out the need for a unique package for the simulations from the DAMPING RINGS to the INTERACTION POINT. The fact is that the simulations are running (except for the BC), but not within an ideal package. Glenn for example uses Merlin, Placet and Guinea-Pig, and he is also testing Lucretia with MatLab (he is enthusiast about it), whereas other people uses LIAR+MatLab. Having several codes is not bad but we should avoid duplication of work.

  Daniel agrees about this and adds that, although Merlin and Placet are growing well, having two codes in Europe is maybe too much: we shall avoid code duplication and there is not enough manpower to develop two codes. After a small discussion all agree that two codes can verify each

other's results, so we should probably keep them all and work on the interface.

Philip ends mentioning the good results obtained by Peder with the dispersion bumps.

- BDS: Glenn works on Beam Based Alignment in the BDS using Lucretia. He demonstrated (via software) that one can align the quadrupoles in the BDS with $\mu$m precision. He is also increasing the hardware realism of his simulation of the intra train feedback (FB), studying the effects on the FB-BPM kickers.

  Philip says that Linda Hendrickson is en expert on FB cascades so it would be nice to introduce her in EUROTeV.

  Daniel asks who is covering the BB intra-pulse feedback. Orbit feedback is covered by Andrea.

  Earth Curvature: Nick concluded that it does not count too much for ILC. Andrea also worked on that and showed a few % emittance growth. Daniel did some simulation for CLIC and found a 20% emittance growth. We are trying to reduce it using dispersion bump and also a more appropriate matching would probably improve the results. He will be in charge to write a task report about this.

  Daniel implemented in Placet the interface to the LICAS Alignment System developed at the Oxford University.

- HTGEN: Helmut goes through the slides;

- BDCS: Marco reports about the state of the Bunch compressor design. Daniel says that Placet will be soon able to simulate it. Also Glenn is working on that with Peter Tenenbaum (Lucretia) at SLAC.

  Marco presents Frank Stulle, who is working on simulating the BC. He is doing a 1-dim simulation taking into account the Synchrotron Radiation emission.

  Daniel congratulates him on the good progresses.

- PCDL: Arnaud reports on his work with Olivier and goes through the slides on the web. Philip Bambade and Olivier say that they would need more computational power. Maybe using the GRID? Daniel says that we would be probably interested in a more general solution.

- BBSIM: Philip reports on behalf of Cecile, who is very busy with the computations with Guinea-Pig, and goes through the slides.

Daniel asks who will come to CERN to the CARE meeting. We should present there some of these good results.

**Conclusions** We shall discuss again about the failure modes. The CARE Meeting will be also a good opportunity to meet and discuss about the report, even though there will be not much time.