LHC:

- Summary on LHC heat load presented at the LMC (30/08)
 - ...related document on heat load observations is in preparation.
- Document on simulations of the different arc elements in the presence of photoemission has been prepared (and circulated).
 - Main results will be presented by Philipp at the next e-cloud meeting.
- Buildup simulation studies for 16L2 limitations ongoing:
 - In particular assessed the effectiveness of the solenoid in the presence of the dipole field from the bus-bars (presented by Gianluigi the LMC)

LHC energy exploitation:

 e-cloud estimates for 7.5 TeV were made (simple scaling for photoelectron effect turned out to be too pessimistic —> full simulation study performed by Galina)



HL-LHC:

- Studies on HL-LHC stability in the presence of e-cloud are ongoing
 - Update given by Annalisa at WP2 meeting (3 Oct).
 - Presentation to be given at the Annual Meeting in Madrid.
- Heat load estimates for the triplets were finalized by Galina including the effect of uncoated parts.
 - Document prepared and circulated.
- First heat load estimates for the arcs performed taking into account photoemission in all elements (by Galina)
 - o model to be further tuned based on LHC data
- Presentation on heat load status given at WP2 meeting (3 Oct)
 - Reports to be given at the TCC (probably on 2 Nov) and at the Annual Meeting in Madrid.



Test run with high intensity 25 ns beams from Mon 9 to Wed 11 Oct.

FCC:

• Map formalism being used by Eleonora to assess the impact of different filling schemes.

PyECLOUD development:

- Generalisation to several ion species is ongoing (Lotta).
- Implemented possibility of importing SEY curve from lab data-file (by Philipp) —> being tested (by Louis).
- Implemented better angular distribution of secondary electrons (Philipp).
- Introduced arbitrary angular distribution of photoelectrons (from file), as requested by Mexican team doing FCC studies (Philipp). And other possibilities for photoemission modeling (photoemission time structure, photoelectron energy spectrum)
- Improved diagnostics (statistics on impact angle is saves), documentation, compatibility with python 3.