Summary of the round table at the ICE Meeting 19 January 2011

Tatiana Pieloni

**Activities:**

* Developing in collaboration with OP Gabriel Muller a GUI to have single bunch footprints for the different LHC running scenarios of 2011. The concept is to be able to visualize the single bunch tune due to the particular collision path and to make visible also the tune spread with amplitude due to different bunch parameters and/or long-range beam interactions. Users will be able to see where each bunch is sitting in the tune diagram and where overlap with resonance occurs. Another GUI we are working on is the single bunch orbit variations due to long-range beam-beam interactions. For this the train program will be implemented in the on-line model to predict for the different filling scheme in the collider the bunch to bunch orbit variation one expects from beam-beam. A graphical comparison to direct bunch to bunch orbit measurements is foreseen also in the on-line model development. Bunch to bunch orbit measurements are followed by J. Wenninger since they will be implemented in the YASP program and made available for other tools.
* Writing up of the Conceptual design report section on beam-beam effects for the Large Hadron-Electron Collider study.
* Preparing the OP shut-down lecture “Introduction to beam-beam effects at the LHC” planned for next 1st February 2011 room 874-1-011 (CCC) at 4pm.
* Working on SVD analysis using python of the transverse dumper pick-up data from last year e-cloud MD days to be presented at next e-cloud meeting after Chamonix hopefully.

**General Infos:**

* Xavier Buffat PhD student will soon start working on beam-beam effects under my supervision and as EPFL PhD student with Prof. Leonid Rivkin. A sharing of Xavier with OP is under discussion to allow the student to be involved from the beginning of the LHC start-up in all beam-beam MDs and activities for the 2011 run.
* I have been asked by J. Wenninger to be his scientific secretary for the LHC operation committee which will follow up all operational aspects of the LHC run 2011.