

LAL contribution

Activities

- Beam experimentation / optical tuning at ATF2 final focus
Project goals: 37 nm vertical spot and 1-2 nm-level beam stability at IP
3 PhDs were supervised at LAL: Y. Rénier, S. Bai (IHEP), M. Alabau (IFIC)
- CLIC final focus optics design optimisation with respect to key parameters (energy, emittance, energy spread) : important (1) for CLIC energy staging, (2) since local chromaticity correction scheme was invented 10 years ago using somewhat different assumptions on parameters
→ 1 PhD will be co-supervised / funded at LAL and CERN from 2012
- New interaction point beam pipe at ATF2 for 1-2 nm level beam stability goal (installation summer 2012, contribution to resolution studies in 2012-2013)
- Development of semi-conductor sensors for beam halo and Compton recoil electron measurement and study at ATF2 : feasibility study OK, funding applications for post-doc and hardware pending, preparation for ATF3 stage

Resources

- P. Bambade (50%) and PhD (50%) on CLIC FFS and ATF2 from 2012
- Applied for 1 post-doc + hardware funding in 2012
Potentially 1 additional PhD from 2013