

DRAFT Minutes of the CLIC project meeting of 13.06.2014

The program and transparencies can be found here:

<https://indico.cern.ch/event/321468/>

Steinar reviewed the minutes of the previous CLIC project meeting in April

News:

Steinar reviewed the agreement in place and being prepared, the MTP preparation and planning, EU projects in the pipeline, and future meetings until the CLIC workshop in January 2015.

Roberto and Nuria briefly reviewed the CTF3 status and plans and X-band test stand status.

The rest of the was dedicated the progress in the technical areas:

Steffen review the module programme including the module being prepared for CTF3:

- The two beam module program will continue as advised by the module review committee
- Good progress in analyzing the data taken on the Lab-module (see as well Helene's talk), to be continued
- Highest priority right now is to get the CLEX module installed and start experiments with it
- Will have to review (again) the objectives and configurations of the lab-based module program evolution
- Prepare transition to 'next' generation modules

Helene reviewed the ongoing alignment studies summarizing as follows:

Alignment studies focused around two PhD theses:

The development of a laser based alignment system (G. Stern)

The development of cam movers for the active pre-alignment of MB quadrupoles (J. Kemppinen)

And the also the work around the modules, in the test-lab, CLEX-test and CLEX, with

- The fiducialisation of the components
- The alignment of all the supports and components
- The validation of the solution developed by ZTS vvu Kosice concerning the supporting of the components
- The preparation of the installation in CLEX

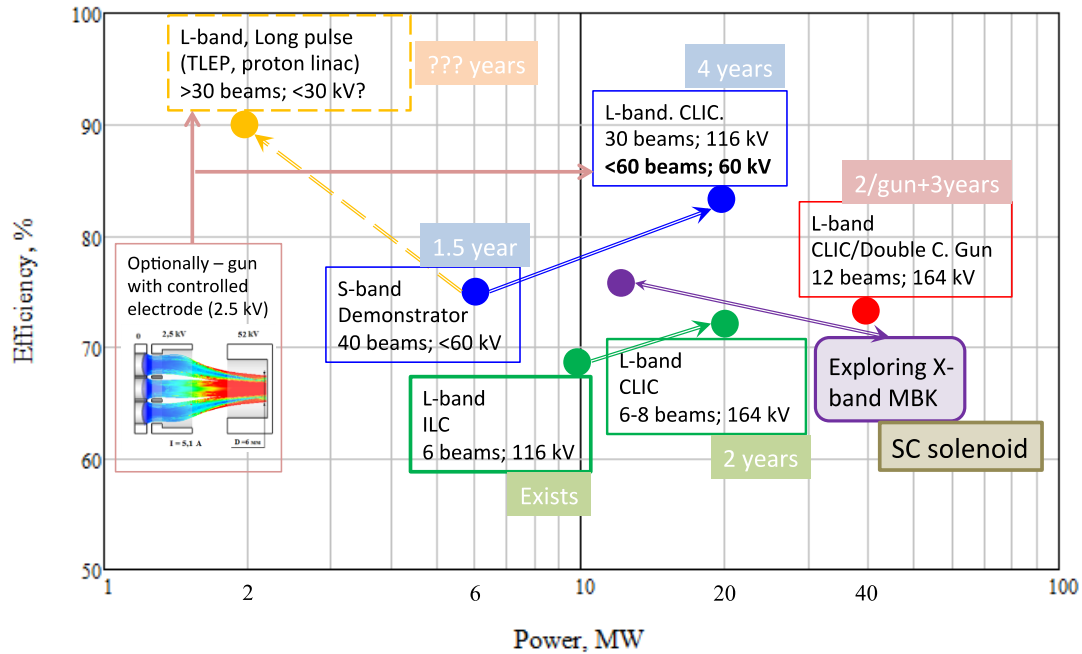
The duty cycles have shown that the measurements methods developed were at the limit of the displacements to be observed. For the next steps, improvements should be performed.

The combination of the 5 DOF adjustment platform and the "new" fiducialisation method will help improving the alignment of the DB quadrupole for CLEX. This is a very good introduction to the PACMAN project.

Shahin reported on the drive beam injector design covering longitudinal dynamics reviewing the results; the SHB system and satellite reduction, the TW

buncher and beam loss reduction. For transverse dynamics he covered the solenoid focusing channel and initial studies of the quadrupole focusing channel.

Igor presented the main directions of the high efficiency power sources and summarized with the attached plot (for future reference):



Michele summarized the CLIC magnet developments giving a quick status on the magnet R&D advancement covering the Main Beam Quadrupole (MBQ), Drive Beam Quadrupole (DBQ), Steering correctors, QD0, SD0 and other studies related to ILC and ATF.

Andrea summarized the recent emittance and wakefield studies in Trieste and gave an update of the ATF studies. He concluded that Fermi is a very good machine for tests with very fast control system and excellent diagnostics. The tools worked very well: emittance reduced by ~35% in H and ~20% in V. The ground-motion correlation experiment at ATF2 shows important progress with one jitter source located and removed: the orbit jitter was reduced from 20% to 14% (half the power) and the correlation measurements improved as well.

Thibaut summarized the ongoing instrumentation studies covering transverse beam profile monitoring, focusing on recent achievements on OTR/ODR developments and R&D on gas jet technology. He also covered bunch length monitors using E-O technique and recent testing in Califes and gave an update on BPM developments for cavity BPMs and DB strip-line BPMs as well as BLM developments.

AOB:

- IPAC 2014 Dresden June 15-20
- Linac 14, September 1-5
- PM Sept 26 (later moved and redefined to LCWS 2014)

- LCWS 2014 Belgrade October 6-10
- PM Dec 16
- CLIC workshop 26-30 January 2015

Steinar Stapnes, December

2014