

CERN news

- CERN Medium Term Plan approved in June Council (LC budget line for 2014-2019)
 - From 2020 Energy Frontier budget line combining FCC and CLIC resources
- Reviewed CLIC WPs afterwards:
 - Module programme (shorter and longer term)
 - Spanish, Finnish and Norwegian contracts UK contracts already foreseen in our planning earlier
 - ATF programme and linked to technical activities
 - Purchase options on 3rd klystron
 - Building 156
 - Scope of DB FE programme
 - XFEL Design Study contribution
 - etc
- Several changes was needed but a revised plan is now being implemented





For your agenda

- LCWS 2014 Belgrade October 6-10
- HG WS end October moved to Spring? California
- Project Meeting Dec 16
- CLIC workshop 26-30 January 2015
- LC workshop in April 13-17 2015



Overview

Europe/Zurich timezone

Timetable

Speaker index

Accommodations

(1)

Starts 26 Jan 2015 13:30 Ends 30 Jan 2015 18:30



CERN Several rooms

Insurance and Visa information

In 2014: 306 registered (the key being good parallel sessions)

How to come to CERN

Visitors' Portable Computers Registrati

CERN Shuttle service

CERN Bike sharing se

CLIC Study Website

Physics and Detector Study Website Main elements:

Open high energy frontier session session, including hadron options with FCC

Accelerator sessions focusing on collaboration efforts and plans 2015-2019, parallel sessions and plenary

High Gradient Applications for FELs, industry, medical

Physics and detector sessions on current and future activities

Collaboration and Institute Boards



LINEAR COLLIDER COLLABORATION



Parameters, Design and Implementation

- •Integrated Baseline Design and Parameters
- •Feedback Design, Background, Polarization
- Machine Protection & Operational Scenarios
- •Electron and positron sources
- Damping Rings
- •Ring-To-Main-Linac
- •Main Linac Two-Beam Acceleration
- •Beam Delivery System
- •Machine-Detector Interface (MDI
- Drive Beam Complex
- •Cost, power, schedule, stages

Main activities



X-band Technologies

- •X-band Rf structure Design
- •X-band Rf structure Production
- •X-band Rf structure High Power Testing
- Novel RF unit developments (high efficiency)
- Creation and Operation of x-band High power Testing **Facilities**
- Basic High Gradient R&D

Experimental verification

- Drive Beam phase feed-forward and feedbacks
- •Two-Beam module string, test with beam
- Drive-beam front end including modulator development and injector
- Modulator development, magnet converters
- Drive Beam Photo Injector
- •Low emittance ring tests
- Accelerator Beam System Tests (ATF and FACET, others)

Technical Developments

- Damping Rings Superconducting Wiggler
- Survey & Alignment
- Quadrupole Stability
- •Warm Magnet Prototypes
- •Beam Instrumentation and Control
- •Two-Beam module development
- Beam Intercepting Devices
- Controls
- Vacuum Systems

Detector and Physics

- Physics studies and benchmarking
- Detector optimisation
- Technical developments



Summary from Monday



The goals and plans for 2013-19 are well defined for CLIC, focusing on the high energy frontier capabilities – well aligned with current strategies – also preparing to align with LHC physics as it progresses in the coming years:

- Aim provide optimized stages approach up to 3 TeV with costs and power not too excessive compared to LHC
- Very positive progress on Xband technology, due to availability of power sources and increased understanding of structure design parameters
 - This week: Review Xband progress: basic understanding, test-stands
 - Applications in smaller systems; FEL linacs key example with considerable interesting in the CLIC collaboration
- Also recent good progress on performance verifications, drivebeam, main beam emittance conservation and final focus studies
 - This week: BBA discussions, BDS/ATF important
 - CTF3 running and plan until end 2016, strategy for systemtests beyond
- Technical developments of key parts well underway with increasing involvement of industry – largely limited by funding
- Detector and physics programme well defined, moving ahead well linking gradually with FCC hadron community
- Collaborations for CLIC accelerator and detector&physics studies are growing