

Session Program

26-30 Jan 2015



CLIC Workshop 2015

Accelerator Session

CERN, Several rooms

Monday 26 January

14:00

Accelerator Session: High-Gradient I

Session | **Location:** CERN, 500/1-001 - Main Auditorium | **Convener:** Walter Wuensch

14:00-14:20 Xbox overview and status

Speaker

Dr Nuria Catalan Lasheras

14:20-14:40 Crab Cavity Results

Speaker

Ben Woolley

14:40-15:00 Post-mortem SEM imaging review

Speaker

Ana Teresa Perez Fontenla

15:00-15:20 Recent X-band activities at Tsinghua University

Speaker

Jiaru Shi

15:20-15:40 Advanced RF acceleration research at SLAC

Speaker

Prof. Sami Tantawi

15:40-16:00 Coffee Break

16:00-16:20 Conditioning and operational algorithms

Speaker

Joseph Tagg

16:20-16:40 LLRF for Xbox-3

Speaker

Ben Woolley

16:40-17:00 Statistical analysis of rf conditioning and breakdowns

Speaker

Jorge Giner Navarro

17:00-17:20 Breakdown statistics in the large-electrode DC spark system

Speaker

Anders Jaakko Korsback

17:20-17:40 Calibration of Dynamic Vacuum Meter

Speaker

Antti Merilainen

18:00

Accelerator Session: Parameters and Design & Technical Studies

Session | **Location:** CERN, 503/1-001 - Council Chamber | **Convener:** Daniel Schulte

14:00–14:20 **Improvements in the tracking code PLACET**

Speaker

Jakob Esberg

14:20–14:40 **Recirculation in PLACET and measurements at CTF3**

Speaker

Dario Pellegrini

14:40–15:00

Octupole component in CLIC accelerating structure and beam dynamics

Speaker

Jim Alexander Ogren

15:00–15:20 **Beam dynamics simulations in the CLIC RTML**

Speaker

Yanliang Han

15:20–15:40 **Progress in CLIC DFS studies**

Speaker

Juergen Pflugstner

15:40–16:00 **Coffee Break**

16:00–16:20 **Long L* FFS options for ILC and CLIC**

Speaker

Fabien Plassard

16:20–16:40 **Injector Options for the Drive Beam**

Speaker

Dr Avni Aksoy

16:40–17:00 **A hybrid positron source with a granular converter for CLIC**

Speakers

Mrs Iryna CHAIKOVSKA, Dr Robert Chehab

17:00–17:20 **Gas jet technology for high intensity**

Speaker

Adam Jeff

17:20–17:40 **Stretched-wire Alignment of a 15 GHz cavity BPM**

Speaker

Silvia Zorzetti

17:40–18:00

Metrology and pre-alignment of the components of CLIC in the PACMAN project

Speaker

Vasileios Vlachakis

18:00–18:20 **Measuring the magnetic axis of quadrupoles by stretched wires**

18:20

Speaker
Domenico Caiazza

Tuesday 27 January

09:00

Accelerator Session: CTF3/Systems Tests and Parameters & Design

Session | **Location:** CERN, 503/1-001 - Council Chamber | **Convener:** Roberto Corsini

09:00–09:20 Drive Beam injector design update

Speaker

Shahin Sanaye Hajari

09:20–09:40 500 MHz solid state amplifiers for the CLIC buncher

Speaker

Purushottam Shrivastava

09:40–10:00 Thermionic and rf gun simulations

Speaker

Mohsen Dayyani Kelisani

10:00–10:20 Thermionic gun design, test stand, klystron update

Speaker

Steffen Doebert

10:20–10:40 PHIN results

Speaker

Christoph Hessler

10:40–11:00 Coffee Break

11:00–11:20 CTF3 Operation: update and plans

Speaker

Piotr Krzysztof Skowronski

11:20–11:40 Phase feed-forward, first experimental results

Speaker

Jack Roberts

11:40–12:00 Beam optics measurements, tools and procedures in CTF3

Speaker

Davide Gamba

12:00–12:20 CLIC module BPMs - Cavity BPM and DB BPM

Speaker

Jack Raymond Towler

12:20–12:40 Beam Loss monitors

Speaker

Eduardo Nebot Del Busto

12:40

09:00

Accelerator Session: High Efficiency Internatinal Klystron Activity (HEIKA)

Session | **Location:** CERN, 160/1-009 | **Convener:** Igor Syratchev

09:00-09:30

Introduction to HEIKA. Tentative structure and objectives

09:30-10:00

Klystron simulations. Review/comparison of existing tools

10:00-10:30

Klystron with adiabatic bunching (Kladistron). Status and prospective

10:30-10:50

Coffee break

10:50-11:20

Bunch congregation and ultimate efficiency study

11:20-11:50

Towards klystrons with 90% efficiency of RF power extraction

11:50-12:20

6MW S-band MBK status/JSC

12:30

14:00

Accelerator Session: Future tests beyond CTF3

Session | **Location:** CERN, 503/1-001 - Council Chamber | **Convener:** Roberto Corsini

14:00-14:10

Motivations

Speaker

Steinar Stapnes

14:10-14:30

Overview of options/hardware

Speaker

Roberto Corsini

14:30-14:50

Diagnostic tests

Speaker

Thibaut Lefevre

14:50-15:10

Impedance measurements

Speaker

Benoit Salvant

15:10-15:30

Use of Electro-Optics Sampling for Impedance measurements

Speaker

steven jamison

15:30-16:00

Coffee break

16:00-16:20

Radiation testing with CALIFES

Speaker

Markus Brugger

16:20-16:40

Plasma wake-field acceleration possibilities in CTF3

Speaker

Erik Adli

18:00

14:00

16:40-17:00 X-FEL requirements

Speakers

Dr Andrea Latina, Dr Gerardo D'Auria

17:00-17:20 CTF3 controls renovation

Speaker

Dr Mick Draper

17:20-18:00 Discussion

Accelerator Session: Structure Design and Production

Session | **Location:** CERN, 60/6-015 - Room Georges Charpak (Room F) | **Convener:** Walter Wuensch

14:00-14:30

CLIC structure design: baseline optimisation and alternative made from halves

Speaker

Hao Zha

14:30-14:50 High-Gradient medical Accelerating Structure

Speaker

Stefano Benedetti

14:50-15:10 Structure fabrication review

Speaker

Dr Nuria Catalan Lasheras

15:10-15:30

Measuring the internal geometry of the TD24 Accelerating Structure for CLIC using RF methods

Speaker

Natalia Galindo Munoz

15:30-15:50 Coffee Break

15:50-16:10

Calibration of Fourier domain short coherence interferometer for absolute dimension measurements

Speaker

Risto Montonen

16:10-16:30

Structure deformation: comparative analysis of rf and dimensional measurements

Speaker

Alberto Degiovanni

16:30-16:50 Structure stacking alignment tolerances

Speaker

Anastasiya Solodko

16:50-17:10 Bonding studies

Speaker
Anastasia Xydou

17:10-17:30 **Travelling-wave buncher**

Speaker
Hamed Shaker

18:00

Wednesday 28 January

08:30

Accelerator Session: Joined Session: X-Band/CTF3 and System tests

Session | **Location:** CERN, 503/1-001 - Council Chamber | **Conveners:** Walter Wuensch, Roberto Corsini

08:40–09:00

Beam-Based Measurements of Long-range Wakefields in the CLIC Accelerating Structures at FACET

Speaker

Hao Zha

09:00–09:20

Two-beam acceleration activities at ANL

Speaker

Dr Wei Gai

09:20–09:40

Dog-leg results

Speaker

Luis Navarro

09:40–10:00

Beam measurements at the CLEX Two-Beam Module

Speaker

Wilfrid Farabolini

10:00–10:20

Coffee Break

10:20–10:40

WF monitors measurements in TBM and TBTS

Speaker

Reidar Lunde Lillestol

10:40–11:00

Short range alignment strategy in CLEX and first results

Speaker

Vivien Rude

11:00–11:20

CLIC module: Analysis of dynamic response

Speaker

Eleni Daskalaki

11:20–11:40

Fiducialisation and initial alignment of components for CLIC

Speaker

Mateusz Sosin

11:40–12:00

- NIKHEF alignment systems developed for CLIC: status and latest results

Speaker

Nikkie Deelen

12:00–12:20

- A laser based alignment system for the CLIC project

Speaker

Guillaume Stern

12:20–12:40

the precision laser inclinometer long-term sensitivity in thermo-stabilized conditions (first experimental data)**Speaker**

Mikhail Lyablin

12:40

09:00

Accelerator Session: ATF2**Session** | **Location:** CERN, 6/R-012 - conference room | **Convener:** Dr Rogelio Tomas Garcia

09:00–09:20

ATF2 progress report**Speaker**

Dr Kiyoshi Kubo

09:20–09:40

IPBSM stabilization and sensitivity to 20nm beam size**Speaker**

Yuya Kano

09:40–10:00

IPBPM commissioning status**Speaker**

Oscar Roberto Blanco Garcia

10:00–10:20

IPBPM measurements and FB results**Speaker**

Prof. Philip Burrows

10:20–10:40

Ultra-low beta study**Speaker**

Marcin Patecki

10:40–11:00

Coffee Break

11:00–11:15

First GM observations and mitigation**Speaker**

Juergen Pflingstner

11:15–11:30

Last run GM studies**Speaker**

Marcin Patecki

11:30–11:50

WFS and DFS studies**Speaker**

Dr Andrea Latina

11:50–12:10

ODR/OTR plans (including OTRI results)**Speaker**

Thomas Aumeyr

12:10–12:30

Beam halo study

	<p>Speaker Shan Liu</p>
	<p>12:30-12:50 Beam collimation study</p> <p>Speaker Nuria Fuster</p>
	<p>12:50-13:00 Update on the wakefield measurement mover setup at ATF2</p> <p>Speaker Jochem Snuverink</p>
13:00	
10:00	<p>Accelerator Session: High Gradient II Session Location: CERN, 60/6-015 - Room Georges Charpak (Room F) Convener: Walter Wuensch</p>
	<p>10:20-10:40 Direct measurement of W nano-tip evolution under electric field</p> <p>Speaker Hirofumi Yanagisawa</p>
	<p>10:40-11:00 CERN dc spark system capabilities</p> <p>Speaker Anders Jaakko Korsback</p>
	<p>11:00-11:20 Field emission current measurements</p> <p>Speaker Tomoko Muranaka</p>
	<p>11:20-11:40 Theoretical modelling of onset of vacuum breakdown process</p> <p>Speakers Flyura Djurabekova, Flyura Djurabekova</p>
	<p>11:40-12:00 High field enhancement due to surface changes</p> <p>Speaker Dr Vahur Zadin</p>
	<p>12:00-12:20 Stability of Cu tips in the nanoscale with and without electric field</p> <p>Speaker Ville Jansson</p>
	<p>12:20-12:40 Breakdown in LHC kicker magnets</p> <p>Speaker Hugo Alistair Day</p>
12:40	

Thursday 29 January

14:00

Accelerator Session: Beam Delivery Systems

Session | **Location:** CERN, 6/R-012 - conference room | **Convener:** Dr Rogelio Tomas Garcia

14:00-14:20 **MDI**

Speaker

Lau Gagnon

14:20-14:40 **Muon background simulations**

Speaker

Fatma Belgin Pilicer

14:40-15:00 **QD0 stabilisation**

Speaker

Laurent BRUNETTI

15:00-15:20 **First thoughts on active feed-forwards for ATF2 based on GM**

Speaker

Douglas Robert Bett

15:20-15:40 **Coffee Break**

15:40-16:00 **Status of tuning simulations of the baseline FFS designs**

Speaker

Guglielmo Giambelli

16:00-16:20 **Two beam tuning**

Speaker

Jochem Snuverink

16:20-16:40 **Mitigation of the Oide effect**

Speaker

Oscar Roberto Blanco Garcia

16:40-17:00 **Magnets for ILC, CLIC and ATF2 FFS**

Speaker

Michele Modena

18:10

14:00

Accelerator Session: Low Emittance Rings

Session | **Location:** CERN, 6/2-004 | **Convener:** Yannis Papaphilippou

14:00-14:25

Extraction kicker stripline measurements and plans for the future beam tests

Speaker

Carolina Belver Aguilar

14:25-14:50 **Design and measurements of the inductive adder pulser**

Speaker
Janne Holma

14:50-15:15 **NbTi prototype progress**

Speaker
Steffen Hillenbrand

15:15-15:40 **Nb3Sn prototype progress**

Speaker
Laura Garcia Fajardo

15:40-16:10 **Coffee Break**

16:10-16:35 **A novel technique for electron cloud mitigation**

Speaker
Allan Gillespie

16:35-17:00

Optics for TME cells with longitudinally varying fields and new DR design

Speaker
Parthena Stefania Papadopoulou

17:00-17:25

Measurements/studies for existing and future light sources: ALBA and SLS2 upgrade

Speaker
Eirini Koukovini Platia

17:25-17:50 **DR non-linear dynamics**

Speaker
Javier Alabau Gonzalvo

17:50-18:00 **Discussion**

18:05

14:00

Accelerator Session: X-Band and FEL

Session | **Location:** CERN, 503/1-001 - Council Chamber

14:00-14:20 **Progress in Shanghai**

Speaker
qiang gu

14:20-14:40 **Beam dynamics for 6 GeV x-fel design using x-band structure**

Speaker
Dr Avni Aksoy

14:40-15:00 **Compression options**

Speaker
Tessa Charles

15:00-15:20 **Exotic schemes for e- beam manipulation**

Speaker
Simone Di Mitri

15:20-15:40 EO development for short bunch length monitoring

Speaker
David Alan Walsh

15:40-16:00 Progress in the UK

Speaker
Graeme Burt

16:00-16:20 Photon production

Speakers
Juergen Pfingstner, Jurgen Pfingstner

16:40-17:00 Coffee break

17:00-18:00 XbFEL Collaboration

Speaker
Dr Gerardo D'Auria

18:35