

## **Session Program**

**17-20 Oct 2011**

**LLRF 2011**

***Poster Session and Industrial Exhibition***

DESY, Auditorium  
Notkestr. 85 22607 Hamburg

## Wednesday 19 October

14:20

### Poster Session and Industrial Exhibition

Session | Location: FLASH HALL

14:20-14:22

#### Design and Implementation of Automatic Cavity Resonance Frequency Measurement and Tuning Procedure for FLASH and European XFEL Cryogenic Modules

**Speaker**

Dr Valeri Ayvazyan

14:22-14:24

#### FLASH II Project: LLRF Options and Tests

**Speaker**

Dr Valeri Ayvazyan

14:24-14:26

#### Klystron Lifetime Management system. Installation at klystron test stand

**Speaker**

Mr Łukasz Butkowski

14:26-14:28

#### LLRF controls based on DOOCS

**Speaker**

Olaf Hensler

14:28-14:30

#### Software support for PCIExpress bus for uTCA-based LLRF control system

**Speaker**

Mr Adam Piotrowski

14:30-14:32

#### LLRF Controller Implementation for uTCA based LLRF System

**Speaker**

Mr Wojciech Jalmuzna

14:32-14:34

#### FPGA architecture of the Spiral 2 digital LLRF

**Speaker**

Mr Yannick Mariette

14:34-14:36

#### Embedded diagnostics in the LEIR and PSB digital LLRF systems

**Speaker**

Dr Andrew Butterworth

14:36-14:38

#### Closed loop performance of the LLRF Vector Control System for Cryo-Module 1 at the SRF test facility at Fermilab

**Speaker**

Dr Philip Varghese

14:38-14:40

#### Superconducting Cavity Model and Simulation for Fermilab's NML

**Speaker**  
Mr Ed Cullerton

14:40-14:42

**1.3 GHz 8 Channel Receiver with Single Channel Transmitter for Fermilab's NML**

**Speaker**  
Mr Ed Cullerton

14:42-14:44

**An electronic circuit for the protection of the Spiral-2 RF power couplers**

**Speaker**  
Mr Philippe De Antoni

14:44-14:46 **ThomX LLRF**

**Speaker**  
Mr Rajesh SREEDHARAN

14:46-14:48

**Refining narrow-band noise signals for transversal beam excitation to improve J-PARC MR slow extraction**

**Speaker**  
Dr Alexander Schnase

14:48-14:50

**SELF EXCITED OPERATION FOR A 1.3 GHz 5-CELL SUPERCONDUCTING CAVITY**

**Speaker**  
Mr Michael Laverty

14:50-14:52 **200 MHz DDS RF Source for the CERN PS**

**Speaker**  
Dr Heiko Damerau

14:52-14:54 **LLRF system for DC-SC photocathode injector at Peking University**

**Speaker**  
Dr Fang Wang

14:54-14:56 **LLRF Commissioning of the new CEBAF 100 MeV Cryomodule**

**Speaker**  
Mr Ramakrishna Bachimanchi

14:56-14:58 **Eight-channel Fast ADC card for Direct Sampling of GHz Signals**

**Speaker**  
Mr Samer Bou Habib

14:58-15:00 **Drift Calibration Module for RF field detectors for FELs.**

**Speaker**  
Mr Jan Piekarski

15:00-15:02

**Reflectometer system for active phase drift compensation in coaxial cables**

**Speaker**  
Mr Przemyslaw Kownacki

15:02-15:04 **Vector Modulator card for the uTCA based LLRF control system****Speaker**

Dr Krzysztof Czuba

15:04-15:06 **Hardware for LLRF Control System in MTCA Standards****Speaker**

Dr Dariusz Makowski

15:06-15:08 **Coax cable drift measurements for LLRF system****Speaker**

Mr Dominik Sikora

## 15:08-15:10

**uTCA fast ADC board for Bunch Arrival Time Monitor signals processing****Speaker**

Mr Stefan Korolczuk

15:10-15:12 **LLRF Hardware architecture and performance of Fermi@Elettra****Speaker**

Mr Anton Rohlev

15:12-15:14 **RF generation from optical pulse trains for the LLRF at FLASH****Speaker**

Mr Thorsten Lamb

15:14-15:16 **LLRF system for the X-band high power test stand at CERN****Speaker**

Mr Luca Timeo

## 15:16-15:18

**Introducing the multi-harmonic RF feedforward to the J-PARC synchrotrons****Speaker**

Dr Masahito Yoshii

15:18-15:20 **Error correction of IQ demodulator used at XFEL/SPRING-8 SACL****Speaker**

Dr takashi ohshima

15:20-15:22 **Digital LLRF for Max-IV****Speaker**

Ms Angela Salom

## 15:22-15:24

**An Equivalent Circuit Model for the ANL APS-U SPX Deflecting Cavities****Speaker**

Tim Berenc

## 15:24-15:26

**A Small-Signal Baseband Transfer Function Model for Superconducting Deflecting Cavities****Speaker**

Tim Berenc

15:26-15:28

**Normalized Small-Signal Baseband Transfer Functions for an RF Cavity****Speaker**

Tim Berenc

15:28-15:30

**INITIAL APPLICATION OF THE RHIC LLRF UPGRADE PLATFORM AT THE BNL COLLIDER-ACCELERATOR DEPARTMENT****Speaker**

Mr Kevin Smith

15:30-15:32

**DESIGN AND APPLICATION OF A FOUR CHANNEL RF ADC FOR THE RHIC LLRF UPGRADE PLATFORM****Speaker**

Mr Kevin Smith

15:32-15:34

**A DETERMINISTIC GIGABIT SERIAL TIMING, SYNCHRONIZATION AND DATA LINK FOR THE RHIC LLRF UPGRADE PLATFORM****Speaker**

Mr Kevin Smith

15:34-15:36

**A New Digital Low-Level Radio Frequency Control System Implementation Based on Multi-carrier Frequency Division Multiplexing Communication Model with Pilot-Tone Channel Compensation****Speaker**

Mr Hengjie Ma

15:36-15:38

**Improvement of Bunch Arrival Time Monitor readout electronics by upgrade to uTCA****Speaker**

Mr Jaroslaw Szewinski

15:38-15:40

**Piezo operation experience at FLASH****Speaker**

Dr Mariusz Grecki

15:40-15:42

**Conceptual Piezo Control System Design for European XFEL****Speaker**

Mr Konrad Przygoda

15:42-15:44

**The LLRF System for REGAE****Speaker**

Dr Matthias Hoffmann

15:44-15:46

**A Field Monitoring System of the LANSCE DTL Systems****Speaker**

Mr Sungil Kwon

15:46-15:48

**Modeling Longitudinal Beam Dynamics by Combining Fourier Coefficients and Moments for Controller Design Including Beam Loading in Synchrotrons****Speaker**

Ms Kerstin Gross

15:48-15:50

**Experimental results and last improvements for the LLRF superconducting cavity control system at IPNO****Speaker**

Mr CHRISTOPHE JOLY

15:50-15:52

**Analysis of Coupling Effects observed during the February 2011 9ma run at FLASH****Speaker**

Julien Branlard

15:52-15:54

**LLRF Performance Results in Fermi@Elettra****Speaker**

Mr Massimo Milloch

15:54-15:56

**Modelling, control design and simulation of a klystron amplifier at ESS-Bilbao****Speaker**

Dr Tomaso Poggi

15:56-15:58

**Digital LLRF Improvements for the NSCL Reaccelerator****Speaker**

Nathan Usher

15:58-16:00

**The near to continuous wave operation preparation and first test at CMTB****Speaker**

Wojciech Cichalewski

17:20