

**ICFA Beam Dynamics  
Mini-Workshop on  
Deflecting/Crabbing Cavity  
Applications in Accelerators**

**Report of Contributions**

Contribution ID: 1

Type: **not specified**

# Welcome

**Presenter:** CHATTOPADHYAY, Swapan (Cockcroft Institute, UK)

Contribution ID: 2

Type: **not specified**

## Program Overview and Local Logistics

**Presenter:** MCINTOSH, Peter (STFC)

Contribution ID: 3

Type: **not specified**

## Overview on Deflecting Cavity Applications

**Presenter:** HOSOYAMA, kenji (KEK, High Energy Accelerator Research Organization)

Contribution ID: 4

Type: **not specified**

## **EUCARD Collaboration Crab Cavity Research**

**Presenter:** MCINTOSH, Peter (STFC)

Contribution ID: 6

Type: **not specified**

## **KEK-B Operational Experience with Crab Cavities**

*Wednesday 1 September 2010 11:00 (30 minutes)*

**Presenter:** FUNAKOSHI, Yoshihiro (KEK)

**Session Classification:** Plenary Session II

Contribution ID: 7

Type: **not specified**

## **LHC Luminosity Upgrade Using Deflecting/Crabbing Cavities**

*Wednesday 1 September 2010 14:15 (30 minutes)*

**Presenter:** CALAGA, Rama (BNL)

**Session Classification:** Working Group Sessions

Contribution ID: 8

Type: **not specified**

## Deflecting Cavities for Electron-ion Collider

**Presenter:** BEN-ZVI, Ilan (Brookhaven National Laboratory)



Contribution ID: 9

Type: **not specified**

## **Motivation and CERN Strategy for Crab Cavities**

**Presenter:** CIAPALA, Edmond (CERN)

Contribution ID: **10**

Type: **not specified**

## **Deflecting RF Cavity for Emittance Exchange Experiment at ANL**

*Wednesday 1 September 2010 14:45 (30 minutes)*

**Presenter:** SHI, Jiaru (CERN)

**Session Classification:** Working Group Sessions

Contribution ID: 11

Type: **not specified**

## **Deflecting Cavity Optimization/Wakefield**

**Presenter:** WANG, Haipeng Wang (Thomas Jefferson Lab)

Contribution ID: 12

Type: **not specified**

## **Short Pulse X-ray (SPX) Project at the APS**

*Wednesday 1 September 2010 16:15 (30 minutes)*

**Presenter:** Dr NASSIRI, Alireza (Argonne National Laboratory - DOE)

**Session Classification:** Working Group Sessions

Contribution ID: 13

Type: **not specified**

## Multipactor Simulations

*Friday 3 September 2010 10:00 (30 minutes)*

**Presenter:** PETER, Stoltz (Tech-X)

**Session Classification:** Working Group 1: Cavity-Beam Interactions

Contribution ID: 14

Type: **not specified**

## **Deflecting Cavities at SPring8**

*Thursday 2 September 2010 12:00 (30 minutes)*

**Presenter:** NAKAZATO, Toshiharu (Spring-8)

**Session Classification:** Working Group 2: Cavity and Coupler Design Studies

Contribution ID: 15

Type: **not specified**

## **ILC/CLIC Crab Cavities**

**Presenter:** Dr BURT, Graeme (Cockcroft Institute)

Contribution ID: 16

Type: **not specified**

## **Deflecting structures development for XFEL and PITZ TDS**

*Thursday 2 September 2010 11:00 (30 minutes)*

**Presenter:** PARAMONOV, Valentin (Institute for Nuclear Research, RAS)

**Session Classification:** Working Group 2: Cavity and Coupler Design Studies



Contribution ID: 17

Type: **not specified**

## **Compact Half-wave Resonator Crab Cavity for the LHC Upgrade**

*Thursday 2 September 2010 11:30 (30 minutes)*

**Presenter:** LI, Zenghai (SLAC)

**Session Classification:** Working Group 2: Cavity and Coupler Design Studies

Contribution ID: **18**

Type: **not specified**

## **X-band Deflectors**

**Presenter:** Dr DOLGASHEV, Valery (SLAC)

Contribution ID: **19**

Type: **not specified**

## **CLIC Crab Cavities**

*Thursday 2 September 2010 12:30 (30 minutes)*

**Presenter:** AMBATTU, Praveen (University of Lancaster)

**Session Classification:** Working Group 2: Cavity and Coupler Design Studies

Contribution ID: 20

Type: **not specified**

## **L-band Deflecting Cavity Design**

Contribution ID: 21

Type: **not specified**

## SRF 4-rod Deflecting Cavities

**Presenter:** Dr BURT, Graeme (Cockcroft Institute)

Contribution ID: 22

Type: **not specified**

## **Deflecting Cavity Designs at the APS**

Contribution ID: 23

Type: **not specified**

**TBC**

Contribution ID: 24

Type: **not specified**

## **ALICE & SRF Infrastructure Tours**



Contribution ID: 25

Type: **not specified**

## **Vertical Emittance Blowup in APS Storage Ring with RF Deflection Scheme**

*Friday 3 September 2010 09:00 (30 minutes)*

**Presenter:** SAJAEV, Vadim (ANL)

**Session Classification:** Working Group 1: Cavity-Beam Interactions

Contribution ID: 26

Type: **not specified**

## **Transverse-to-Longitudinal Emittance Exchange Using an RF Deflecting Cavity**

*Friday 3 September 2010 12:00 (30 minutes)*

**Presenter:** Dr DOLGASHEV, Valery (SLAC)

**Session Classification:** Working Group 1: Cavity-Beam Interactions

Contribution ID: 27

Type: **not specified**

## **On-cell Waveguide Damping Tests**

**Presenter:** WANG, Haipeng Wang (Thomas Jefferson Lab)

Contribution ID: 28

Type: **not specified**

## **Deflecting Cavity Applications on ALICE and NLS**

*Friday 3 September 2010 11:00 (30 minutes)*

**Presenter:** Dr JAMISON, Steve (STFC Daresbury Laboratory)

**Session Classification:** Working Group 1: Cavity-Beam Interactions

Contribution ID: 29

Type: **not specified**

## **ANL Crab Cavity Development**

*Friday 3 September 2010 11:30 (30 minutes)*

**Presenter:** WANG, Haipeng Wang (Thomas Jefferson Lab)

**Session Classification:** Working Group 1: Cavity-Beam Interactions

Contribution ID: **30**

Type: **not specified**

## **TEM-type Cavities**

*Friday 3 September 2010 09:30 (30 minutes)*

**Presenter:** RIMMER, Bob

**Session Classification:** Working Group 1: Cavity-Beam Interactions

Contribution ID: **31**

Type: **not specified**

## Working Group 1 Summary

**Presenters:** BORLAND, Michael (ANL); HOSOYAMA, kenji (KEK, High Energy Accelerator Research Organization)

Contribution ID: 32

Type: **not specified**

## Working Group 2 Summary

**Presenters:** DELAYEN, Jean (Thomas Jefferson National Accelerator Facility); CALAGA, Rama Buchi Rao



Contribution ID: 33

Type: **not specified**

## **Closing Remarks (Announcing 2012 Workshop)**

**Presenters:** Dr NASSIRI, Alireza (Argonne National Laboratory - DOE); MCINTOSH, Peter (STFC)

Contribution ID: 34

Type: **not specified**

## **Beam Dynamics of Chirp Scheme in Storage Rings**

*Wednesday 1 September 2010 12:00 (30 minutes)*

**Presenter:** EMERY, Louis (Argonne National Laboratory)

**Session Classification:** Plenary Session II

Contribution ID: 35

Type: **not specified**

## Working Group Charges

*Wednesday 1 September 2010 14:00 (15 minutes)*

**Presenter:** Dr NASSIRI, Alireza (Argonne National Laboratory - DOE)

**Session Classification:** Working Group Session

Contribution ID: **36**

Type: **not specified**

## Registration

Contribution ID: 37

Type: **not specified**

## **Science of Short Pulse X-rays in Synchrotron Light Sources**

**Presenter:** YUELIN, Li (ANL)

Contribution ID: **38**

Type: **not specified**

## **EUCARD Collaboration Crab Cavity Research**

*Wednesday 1 September 2010 12:30 (30 minutes)*

**Presenter:** MCINTOSH, Peter (STFC)

**Session Classification:** Plenary Session II

Contribution ID: 39

Type: **not specified**

## **Emittance Exchange Experiment at FNAL and its Applications**

*Wednesday 1 September 2010 15:45 (30 minutes)*

**Presenter:** YIN-E, Sun (Fermi National Accelerator Laboratory)

**Session Classification:** Working Group Sessions

Contribution ID: 40

Type: **not specified**

## **Deflecting Cavity Development for Project-X**

**Presenter:** NIKOLAY, Solyak (FNAL)



Contribution ID: 41

Type: **not specified**

## **Particularities of Normal Conducting L-band Defecting Cavities**

**Presenter:** PARAMONOV, Valentin (INR)

Contribution ID: 42

Type: **not specified**

## **Dielectric Loaded Waveguide as a Deflecting Cavity**

**Presenter:** KUSTOM, Bob (ANL)

Contribution ID: 43

Type: **not specified**

## Workshop Close

*Friday 3 September 2010 13:45 (15 minutes)*

**Session Classification:** Working Group 1: Cavity-Beam Interactions

Contribution ID: 44

Type: **not specified**

## **Closing Remarks (Announcing 2012 Workshop)**

*Friday 3 September 2010 12:30 (15 minutes)*

**Session Classification:** Working Group 1: Cavity-Beam Interactions

Contribution ID: 45

Type: **not specified**

## **Dielectric Loaded Waveguide as a deflecting cavity**

*Thursday 2 September 2010 09:00 (30 minutes)*

**Presenter:** Dr KUSTOM, Bob (ANL)

**Session Classification:** Working Group2: Cavity and coupler design studies

Contribution ID: 46

Type: **not specified**

## **X-band Deflectors**

*Thursday 2 September 2010 09:30 (30 minutes)*

**Presenter:** Dr DOLGASHEV, Valery (SLAC)

**Session Classification:** Working Group2: Cavity and coupler design studies

Contribution ID: 47

Type: **not specified**

## **Experimental studies for ILC and CLIC crab cavity systems**

*Thursday 2 September 2010 10:00 (30 minutes)*

**Presenter:** DEXTER, Amos (Lancaster University)

**Session Classification:** Working Group2: Cavity and coupler design studies

Contribution ID: **48**

Type: **not specified**

## **Coffee break**

*Thursday 2 September 2010 10:30 (30 minutes)*

**Session Classification:** Working Group2: Cavity and coupler design studies



Contribution ID: 49

Type: **not specified**

## **Particularities of normal conducting L-band deflecting cavities**

*Thursday 2 September 2010 14:00 (30 minutes)*

**Presenter:** PARAMONOV, Valentin (Institute for Nuclear Research, RAS)

**Session Classification:** Working Group 2: Cavity and coupler design studies

Contribution ID: 50

Type: **not specified**

## **SRF 4-rod Deflecting Cavities**

*Thursday 2 September 2010 14:30 (30 minutes)*

**Presenter:** BURT, Graeme (Cockcroft Institute)

**Session Classification:** Working Group 2: Cavity and coupler design studies

Contribution ID: 51

Type: **not specified**

## **Deflecting Cavity Development for Project-X (Webex)**

*Thursday 2 September 2010 15:00 (30 minutes)*

**Presenter:** SOLYAK, Nikolay (FNAL)

**Session Classification:** Working Group 2: Cavity and coupler design studies

Contribution ID: 52

Type: **not specified**

## Coffee break

*Thursday 2 September 2010 15:30 (30 minutes)*

**Session Classification:** Working Group 2: Cavity and coupler design studies

Contribution ID: 53

Type: **not specified**

## **ALICE and SRF Infrastructure Tour**

*Thursday 2 September 2010 16:00 (1h 30m)*

**Session Classification:** Working Group 2: Cavity and coupler design studies

Contribution ID: 54

Type: **not specified**

## Shuttle to hotels

*Thursday 2 September 2010 17:30 (30 minutes)*

**Session Classification:** Working Group 2: Cavity and coupler design studies

Contribution ID: 55

Type: **not specified**

## **Workshop Dinner (Peckforton Castle)**

*Thursday 2 September 2010 18:00 (4h 30m)*

**Session Classification:** Working Group 2: Cavity and coupler design studies

Contribution ID: **56**

Type: **not specified**

## **Registration**

*Wednesday 1 September 2010 08:30 (30 minutes)*

**Session Classification:** Plenary Session I



Contribution ID: 57

Type: **not specified**

## Welcome

*Wednesday 1 September 2010 09:00 (15 minutes)*

**Presenter:** CHATTOPADHYAY, Swapan (Cockcroft Institute, UK)

**Session Classification:** Plenary Session I

Contribution ID: 58

Type: **not specified**

## **Program overview and local logistics**

*Wednesday 1 September 2010 09:15 (15 minutes)*

**Presenter:** MCINTOSH, Peter (STFC)

**Session Classification:** Plenary Session I

Contribution ID: 59

Type: **not specified**

## **New type of a bunch compressor and generation of a short wavelength coherent radiation**

*Wednesday 1 September 2010 09:30 (30 minutes)*

**Presenter:** SAJAEV, Vadim (ANL)

**Session Classification:** Plenary Session I

Contribution ID: **60**

Type: **not specified**

## **Science of short pulse x-rays in synchrotron light sources**

*Wednesday 1 September 2010 10:00 (30 minutes)*

**Presenter:** LI, Yuelin (ANL)

**Session Classification:** Plenary Session I

Contribution ID: **61**

Type: **not specified**

## **Coffee break**

*Wednesday 1 September 2010 10:30 (30 minutes)*

**Session Classification:** Plenary Session I

Contribution ID: **62**

Type: **not specified**

## **Motivation and CERN Strategy for Crab Cavities**

*Wednesday 1 September 2010 11:30 (30 minutes)*

**Presenter:** CIAPALA, Edmond (CERN)

**Session Classification:** Plenary Session II