

Monday July 11, 2011

Revision 1 (Blue)

7:15 AM **Bus leaves the Crowne Plaza Hotel**

8:00 AM **Arrives at ORNL Conference Center**

8:30 AM **Welcome to ORNL and OLAV III** **Dr. Thom Mason ORNL Laboratory Director**

8:40 AM **Workshop organization** **Peter Ladd**

8:45 AM **Feedback from OLAV II** **Gao-Yu Hsiung**

8:55 AM **OLAV III Evaluation** **Llius Miralles**

Session 1 - Proton Storage Rings - Moderator- Ray Veness

9:00 AM Experience with first full year of LHC operation, Giuseppe Bregliozi, CERN

9:25 AM The Operation of Tevatron Vacuum System, [Dave Augustine](#), Fermilab

9:50 AM RHIC Operation and Maintenance, Sumanta Nayak , Brookhaven National Laboratory

10:15 AM **Break**

Session 2 - Proton Storage Rings - Moderator- Dick Hseuh

10:45 AM LHC Vacuum Consolidation and Upgrade Plans, Raymond Veness, CERN

11:10 AM Engineering, Integration and installation of experimental beam pipes: the case of LHC, Patrick Lepeule, CERN

11:35 AM Experience with the LHC insulation vacuum system, Willemjan Maan, CERN

Wrap-up - Session, Moderators- Dick Hseuh and Ray Veness

12:00 PM General discussion on AM sessions

12:15 PM **Lunch**

12:45 PM **Tours**

Group 1, SNS Accelerator (Red)

Group 2, SNS Accelerator (Blue)

Group 3, SNS Cryogenic and RF Test Facility (Green)

Group 4, SNS Cryogenic and RF Test Facility (Yellow)

2:15 PM Return from tours

Session 3 - Proton and Ion Synchrotrons - Moderator- Joe Herbert

- 2:20 PM The Spallation Neutron Source (SNS) Power Upgrade Project, Kevin Jones, Oak Ridge National Laboratory / SNS
- 2:45 PM Facility for Rare Isotope Beams (FRIB) Project – Accelerator Challenges and Progresses
Jie Wei, Michigan State University (MSU)
- 3:45 PM Break**

Session 4 - Proton and Ion Synchrotrons - Moderator- Peter Ladd

- 4:15 PM Gas loads into SIS100 cryogenic vacuum sections, Andreas Kraemer, GSI
Helmholtzzentrum für Schwerionenforschung GmbH
- 4:40 PM Overview of the Spiral 2 project - Specific constraints for the vacuum system, Patrick
Dolegieviev, GANIL
- 5:05 PM The R&D of the CSNS/RCS Vacuum System, Yating Wang, Institute of High Energy
Physics, Chinese Academy of Science

Wrap-up - Session, Moderators- Joe Herbert and Peter Ladd

- 5:30 PM General discussion on the PM sessions
- 5:45 PM Adjournment**
- 6:00 PM Bus returns to the Crowne Plaza Hotel**

Tuesday July 12, 2011

- 7:15 AM Bus leaves the Crowne Plaza Hotel**
- 8:00 AM Arrives at ORNL Conference Center**

Session 5 - Electron Accelerators and FEL - Moderator- Dick Hseuh

- 8:30 AM The International Linear Collider, Barry Barish, California Institute of Technology
- 9:30 AM Update of the vacuum system of the European X-ray free electron laser XFEL, Torsten
Wohlenberg, Deutsches Elektronen Synchrotron Hamburg (DESY)
- 9:55 AM Break**

Session 6 - Electron Accelerators and FEL - Moderator- Joe Herbert

- 10:30 AM Linac Coherent Light Source (LCLS) Vacuum Systems, Karen Fant, SLAC National
Accelerator Laboratory

11:30 AM Experiences of Vacuum System Conversion and Operation for CEsrTA, Yulin Li, CLASSE, Cornell University

Wrap-up - Session, Moderators- Joe Herbert and Dick Hseuh

11:55 PM General discussion on AM sessions

12:10 PM Lunch

Session 7 - Synchrotron Radiation - Moderator, Gao-Yu Hsiung

1:10 PM Diamond Light Source vacuum systems: the first four years of user operations, Matthew Cox, Diamond Light Source

1:35 PM ALBA vacuum system installation and commissioning, Lluís Miralles, CELLS/ALBA

2:00 PM Status of National Synchrotron Light Source II Project, Hsiao-Chaun Hseuh, Brookhaven National Lab

3:00 PM Break

Session 8 - Synchrotron Radiation - Moderator, Ray Veness

3:20 PM Latest development and progress of the vacuum system for the 3 GeV TPS accelerator, Gao-Yu Hsiung, NSRRC

3:45 PM Experience with Fabricating the Storage Ring Vacuum Chambers for NSLS II, Charles Hetzel Brookhaven National Laboratory

4:10 PM Upgrade of the ESRF vacuum system, Michael Hahn, ESRF

4:35 PM Upgrade of NSLS Vacuum for the Research and Development of NSLS-II, Jih-Perng Hu Brookhaven National Laboratory

Wrap-up - Session - Moderators- Gao-Yu Hsiung and Ray Veness

5:00 PM General discussion on the PM sessions

5:15 PM Adjournment

5:30 PM Bus returns to the Crowne Plaza Hotel

6:15 PM Bus arrives at Crowne Plaza Hotel

6:45 PM Bus leaves for Workshop Dinner

10:30 PM Bus return from Workshop Dinner

Wednesday July 13, 2011

7:15 AM **Bus leaves the Crowne Plaza Hotel**

8:00 AM **Arrive at ORNL Conference Center**

Session 9 - Vacuum Pumps, Instruments and Process - Moderator- Gao-Yu Hsiung

8:30 AM ERDA investigations on NEG ageing, Marc Wengenroth, GSI Helmholtzzentrum für Schwerionenforschung GmbH

8:55 AM A novel way to combine NEG and sputter ion pump technologies to meet the challenges of UHV-XHV systems, Antonio Bonucci, SAES Getters S.p.A

9:20 AM Electron cloud studies, Bernard Henrist, CERN

9:45 AM **Break**

Session 10 - Vacuum Pumps, Instruments and Process - Moderator - Dick Hseuh

10:15 AM Stripper foils for high intensity accelerators, Michael Plum, Oak Ridge National Laboratory /SNS

10:40 AM Particulate Free Processing of Accelerator Beam Line Components, Robert Todd, Brookhaven National Laboratory

11:05 AM Calibration of extractor gauges down to 1E-10 Pa, Janez Setina, Institute of Metals and Technology

Wrap-up - Session Moderators- Dick Hseuh and Gao-Yu Hsiung

11:20 PM General discussion on AM sessions

11:35 PM **Lunch and manufacturers exhibits**

12:15 PM **Tours**

Group 1, SNS Cryogenic and RF Test Facility (Red)

Group 2, SNS Cryogenic and RF Test Facility (Blue)

Group 3, SNS Accelerator (Green)

Group 4, SNS Accelerator (Yellow)

1:45 PM Return from tours

Session 11, Vacuum Systems Monitoring and Control - Moderator- Joe Herbert

1:50 PM Fast response of cold-cathode and ion pumps for vacuum interlock, Marcelo Ferreira BNL/NSLS II

- 2:15 PM Developments of the fast valve system used on the Diamond Light Source, Hugo Shiers, Diamond Light Source
- 2:40 PM Plans for the FAIR vacuum control system, Marc Wengenroth, GSI Helmholtzzentrum für Schwerionenforschung GmbH
- 3:05 PM The SNS Vacuum Control System Upgrade For The Superconducting Linac, Derrick Williams, Oak Ridge National Laboratory

Wrap-up - Session Moderators- Joe Herbert

- 3:20 PM General discussion on the PM sessions

3:55 PM Break and manufacturers exhibits

Session 12, Manufacturers Forum - Moderator- Peter Ladd and Janez Setina

- 4:10 PM Manufacturers representatives assemble in Workshop meeting room
- 4:15 PM Manufacturers Forum
- 5:45 PM Adjournment**
- 6:00 PM Bus returns to the Crowne Plaza Hotel**

Thursday July 14, 2011

- 7:15 AM Bus leaves the Crowne Plaza Hotel**

- 8:00 AM Arrives at ORNL Conference Center**

Session 13, Fusion, Instruments and Superconducting - Moderator- Ray Veness

- 8:30 AM National Ignition Facility Vacuum Systems, Igor Maslennikov, Lawrence Livermore National Laboratory
- 8:55 AM Overview of ITER Vacuum Systems, David Rasmussen, Oak Ridge National Laboratory
- 9:20 AM ITER Pellet Injection System - Vacuum Technology, Larry Baylor, Oak Ridge National Laboratory
- 9:45 AM Break and manufacturers exhibits**

Session 14, Fusion, Instruments and Superconducting - Moderator- Janez Setina

- 10:15 AM Challenges in operating fusion power plant vacuum systems, Thomas Giegerich, Karlsruhe Institute of Technology (KIT)

10:40 AM Neutron Scattering Instruments - How we use vacuum chambers, Kenneth Herwig, Oak Ridge National Laboratory

11:05 AM Vacuum issues for long superconducting power cables, Mike Gouge, Oak Ridge National Laboratory

Wrap-up - Session Moderators- Janez Setina and Ray Veness

11:30 AM General discussion on AM sessions

11:45 AM [OLAV III Evaluation - Llius Miralles](#)

11:50 AM **Lunch and manufacturers exhibits**

Session 15, Modeling of Fusion Vacuum Systems - Moderator- Gao-Yu Hsiung

1:15 PM Vacuum System for the ITER Electron Cyclotron Transmission Lines, David Rasmussen, Oak Ridge National Laboratory

1:40 PM Cryogenic Viscous Compressor Development and Modeling for the ITER Vacuum System
Larry Baylor, ORNL

2:05 PM Development of vacuum flow modeling tools, Thomas Giegerich, Karlsruhe Institute of Technology (KIT)

Wrap-up - Session Moderators- Gao-Yu Hsiung

2:30 PM General discussion on the PM sessions

2:45 PM Break and manufacturers exhibits

Session 16 - Closing Session

3:30 PM Open Forum Discussion- Moderated by Organizing Committee

4:00 PM Summary of OLAV III- Organizing Committee

4:20 PM OLAV IV - Peter Ladd

4:30 PM Workshop close - Peter Ladd

4:45 PM Adjournment

5:00 PM Bus returns to the Crowne Plaza Hotel