

Minutes of the Joint Meeting of the ICFA Beam Dynamics Panel and the Advanced and Novel Accelerators Panel

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There was a joint meeting of the ICFA Beam Dynamics (BD) Panel and the Advanced and Novel Accelerators (ANA) Panel on September 7, 2011 from 18:00 to 20:30 in the Maria Cristina Room, Kursaal in San Sebastian, Spain during IPAC11. Twenty-four people attended, including 17 BD panel members or their representatives, and 7 ANA panel members or their representatives. The list of attendees is in Appendix 1 and the agenda in Appendix 2.

The meeting was chaired jointly by Weiren Chou, head of the Beam Dynamics Panel, and Mitsuru Uesaka, head of the Advanced and Novel Accelerators Panel. The format was a working dinner, kindly sponsored by the Fermi Research Alliance LLC. It was the second joint meeting between the two ICFA panels and proved to be stimulating, productive and mutually beneficial.

After a brief round-table introduction, the BD Panel welcomed four new members: Toshiyuki Okugi (KEK), George Neil (JLab), John Byrd (LBNL) and Elias Metral (CERN). The panel also expressed appreciation for the valuable service of four outgoing members: Junji Urakawa (KEK), Kwang-Je Kim (ANL), Miguel Furman (LBNL) and Alessandra Lombardi (CERN).

Weiren Chou gave a report on BD panel activities over the past two years. The Panel organized a number of ICFA Advanced Beam Dynamics Workshops (ABDWs) and mini-workshops. All ABDWs since 2006 have published proceedings via JACoW, whereas formal proceedings are not required for the ICFA mini-workshops. The Panel published three newsletters in 2009 and three in 2010. All newsletters from no. 1 to no. 54 can be read and downloaded from the panel web site. The Panel has been organizing the annual *International Accelerator School for Linear Colliders* since 2006. The Panel together with the ANA Panel is involved in the newly formed collaboration between ICFA and ICUIL (the International Committee for Ultra Intense Lasers). A joint task force has been established between the two panels and the ICUIL.

Three working group leaders, Yoshiharu Mori (High Intensity Hadron Beams WG), Marica Biagini (High Luminosity e⁺e⁻ Collider WG) and George Neil (Future Light Sources WG) presented reports on the activities of their working group and the ICFA workshops they are organizing (ERL2011, FLS2012, HB2012 and the Low Emittance Rings mini-workshop).

Ingo Hofmann reported on the ICFA-ICUIL Joint Task Force (JTF) and the first Joint Workshop last year held at GSI. The JTF presently has 16 members from the two committees and is chaired by Wim Leemans (LBNL). A JTF White Paper entitled "*High Power Laser Technology for Accelerators*," summarizing the discussions at the GSI workshop, is scheduled for publication this December. At this meeting the two panels unanimously approved a special edition of the *ICFA Beam Dynamics Newsletter* (no. 56, December 2011) for publishing the White Paper. The publication will be coordinated with the ICUIL for a synchronized announcement of the two committees. The second joint workshop will take place from September 20-22, 2011 at LBNL.

Mitsuru Uesaka gave a report on behalf of the ANA Panel. The Panel has 19 members. It organized the 68th Scottish Universities Summer School in Physics (SUSSP), which was also the 7th in the series of “*Laser-Plasma Interactions and Applications*,” from August 15-27, 2011 at the University of Strathclyde. Mark Wiggins gave a detailed report on this school. The ANA Panel has started a newsletter, which is to be published once a year. Each newsletter has a theme. The next one is “*Compact accelerators for evaluation and analysis*.” The editor is Chuanxiang Tang, who presented the table of contents, prospective authors and publication schedule. The ANA Panel organized a Laser and Plasma Accelerator Workshop (LPAW2011) last June in China. Patric Muggli reported on this workshop. Ryoichi Hajima discussed several new aspects in the development of advanced and novel accelerators.

Susumu Kamada, who has been in charge of the distribution and printing of the ICFA Beam Dynamics Newsletter in the Asia and Pacific region since 1988, will be retiring next year. Toshiyuki Okugi will take on this job starting January 2012.

At the meeting the ICFA BD Newsletter editors for the next two years were decided. They are:

- No. 57 April 2012 – G. Neil (Jlab)
- No. 58 August 2012 – E. Metral (CERN)
- No. 59 December 2012 – J. Byrd (LBNL)
- No. 60 April 2013 – Y. Cai (SLAC)
- No. 61 August 2013 – T. Okugi (KEK)

There was a discussion about a request from the OECD Global Science Forum (GSF). It has a project for a case study of how one particular research infrastructure – CERN – generates impacts that go beyond its primary mission of advancing fundamental knowledge. In connection with this project, GSF asked the BD Panel for input on changes over the past 20-25 years in the numbers and locations of energy-frontier HEP accelerators. GSF will also discuss current trends, possibly including intensity-frontier and cosmic-frontier projects. In order to provide accurate information to GSF, a small team including representatives from several HEP accelerator laboratories was formed at the meeting. It will prepare a table (names of HEP accelerators, locations, energies, operation periods, impact on the field, etc.) and send it to GSF.

The next panel meeting will be in May, 2013 in Shanghai, China during IPAC 2013.

Appendix 1: List of Participants

ICFA Beam Dynamics Panel

- Ralph Assmann (CERN, for Alessandra Lombardi and Elias Metral)
- Rick Baartman (TRIUMF)
- Marica Biagini (LNF-INFN)
- Mike Blaskiewicz (BNL, for Wolfram Fischer)
- Yunhai Cai (SLAC)
- Weiren Chou (Fermilab)
- Ingo Hofmann (GSI)
- Jiho Jang (KAERI, for In Soo Ko)
- Yoshiharu Mori (Kyoto U.)
- George Neil (Jlab)

Toshiyuki Okugi (KEK)
Chris Prior (RAL)
Alex Ratti (LBNL, for Miguel Furman and John Byrd)
Yuri Shatunov (BINP)
Junji Urakawa (KEK)
Rainer Wanzenberg (DESY)
Chuang Zhang (IHEP, for Jiuqing Wang and Jie Gao)

ICFA Advanced and Novel Accelerators Panel

Ryoichi Hajima (JAEA)
Tom Luiten (TU Eindhoven)
Patric Muggli (MPI)
Louis Rinolfi (CERN)
Chuanxiang Tang (Tsinghua U.)
Mitsuru Uesaka (Tokyo Univ.)
Mark Wiggins (Strathclyde U., for Dino Jaroszynski)

Appendix 2: Meeting Agenda

Round-table introduction

Welcome to new panel members: T. Okugi, G. Neil, (J. Byrd and E. Metral are absent)

Part I – Short presentations (5-10 minutes each):

1. W. Chou (Fermilab): Report from the BD Panel
2. Y. Mori (Kyoto U.): Report from the High Intensity Hadron Beams Working Group
3. M. Biagini (INFN/Frascati): Report from the e+e- Collider Working Group
4. G. Neil (JLab): Report from the Future Light Sources Working Group
5. I. Hofmann (GSI): Report from the ICFA-ICUIL Joint Task Force (JTF) and Joint Workshop
6. M. Uesaka (Tokyo U.): Report from the ANA Panel
7. M. Wiggins (Strathclyde U.): Report on the International Summer School on Laser-Plasma Interactions and Applications
8. P. Muggli (MPI): Report on the Laser and Plasma Accelerator Workshop 2011
9. C. Tang (Tsinghua U.): Status of the Newsletter on Compact Accelerators for Evaluation and Analysis
10. R. Hajima (JAEA): New Aspects to Advanced and Novel Accelerators

Part II – Discussions (40 minutes):

1. ICFA BD Newsletter issue editors for 2012-2013
2. Newsletter distribution (R. Wanzenberg, T. Okugi, W. Chou)
3. Special edition of the December 2011 issue of the ICFA BD Newsletter for publication of the ICFA-ICUIL JTF White Paper
4. Request from the *OECD Global Science Forum* soliciting input from this panel on the changing landscape of high-energy accelerator laboratories over the past 20 years
5. Next panel meeting

6. Any other business