

July 29, 2008-07-25

Agenda of the meeting of the ICFA panel on advanced and novel accelerators

Chair: Mitsuru Uesaka(Univ.Tokyo)

1. Suggestion to the core ICFA activity

Several panel members told the comments that the scope and management of the ICFA was too high-energy/particle-physics oriented and that more from light sources, compact accelerators and other applications should be involved. On the other hand, one member of the ICFA committee suggested me that the division of beam physics should be formed at IUPAP (International Union of Pure and Applied Physics) and that we were going to treat more above subjects at ICFA. Since the current leading persons are not necessarily positive to the opinion and those are replaced soon for the next term, we should wait for it and start such suggestion then.

How about such movement?

2. ICFA endorsed workshops

The workshop on Inverse Compton Scattering Source chaired by Prof. Luca Serafini has been endorsed already. Further, the workshop on plasma accelerator to be chaired by Prof. Thomas Katsouleas would be the next candidate.

3. Related symposium/workshop/seminar/school

The panel endorsement of workshops is supposed to be done together with checking and confirming their policy, quality and management. However, I think that the above not too large activity should be also encouraged among the members and related persons. We don't have to advise to those organizers so much on the quality and policy. Actually, comparing with the activity of the neighboring ICFA panel on beam dynamics, we want to add as many activities as possible, to be honest. Therefore, I would like to suggest that those occasions where at least one member contributes should be regarded as "Related symposium/workshop/seminar/school" and included to our activities, which are informed our website and documents. As far as I have known in the Asian region, the following ones are the candidates.

- University of Tokyo - Tsinghua University Joint Symposium on Global

sustainability and nuclear education and research, at Tsinghua University, Beijing, China, May 18-22, 2008 (Prof. Chuangxiang Tang, Uesaka)

- Summer School on Laser Plasma Accelerator at APRI, GIST, Korea, 2008 (Prof. Jongmin Lee)

Surely almost all members must have such occasions. If you agree, we can anyway write a certain amount of items there.

4. Newsletter

It is most tough, but looks most important. As you may have known, the beam dynamics panel is publishing and circulating a newsletter of a large volume every several months, which is really amazing. One of them is attached. Since all members are quite busy, we cannot follow a similar way. However, we may have to do something similar in order to show our presence at ICFA. Then, I would like to suggest that we share the topics from advanced and novel accelerators, write and circulate it with 10-20 pages electrically for about two years of our term. Those contributions are to be edited and integrated to a monographic publication by us. I am thinking one candidate of its title would be "Advanced Compact Accelerators and Applications", based on the discussion here and expectation from the high energy side. Considering your specialties, let me write an example of the contents as below.

"Advanced Compact Accelerators and Applications"

S-band linac and application: L.Serafini, J.Louiten et al.

L-band linac including superconducting and application: S.Schreiber et al

X-band linac: Louis Rinolfi et al.

Medical physics application: Mitsuru Uesaka et al.

Compact linacs and industrial application: Tang Chuangxiang et al.

Inverse Compton scattering source and industrial application: R.Ruth et al.

High brightness beam and application: J.Rosenzweig et al.

Wakefield accelerator and application: W.Gai et al.

Extremely high RF accelerator and application: B.Carsten et al.

FEL application: R.Hajima et al.

Ion cooling and application: I.Ben-zvi et al.

Laser plasma electron accelerator and application (Energy frontier, Pump-and-probe analysis, Intense photon science, FEL etc.): W.Leemans, B.Cros, Jongmin Lee, Dino

Jaroszynski et al.

Beam plasma accelerator and application: P.Muggli et al.

Compact ion accelerator and application: A.Noda et al.

Topics on beam physics: F.Zimmermann et al.

The listed persons are the issue editors who are responsible for the subjects and can ask other members' contributions and helps, similarly as the beam dynamics.

If we refer to the form of the beam dynamics' newsletter, the contents would be the following,

- Foreword
- From the chair
- From the issue editor
- Topics
- Activity Reports
- Workshop and Conference Reports
- Recent doctoral thesis
- Forthcoming events.

Even helps from collaborators except the members are also available, I think. The subjects can be improved after our discussion from now on. Some overlapping of the contents such as applications can be allowable at the stage of the electrical circulation. Then, they will be edited by us properly at the stage of publication. As you may know, I wrote, edited and published the monograph of "Femtosecond Beam Science (<http://www.icpress.co.uk/books/physics/p278.html>)" from Imperial College Press in 2005. Its contents are attached here.