

Focus: Future Frontiers in Accelerators „F3iA 2016“ 5 -9 December 2016

Scope and goal of F3iA workshop

The F3iA workshop shall discuss the future of particle accelerators beyond presently ongoing projects and design studies. The scope with a limited number of participants shall allow for intensive discussions and brainstorming. We want to discuss the following questions, amongst others:

- What will be the likely needs and applications for future accelerators in the second half of the 21st century?
- How would these accelerators likely look like and how would we construct them?
- Can we see any “neglected” solutions that can help us solving future accelerator challenges?
- Are there any methods and concepts that are becoming possible with latest technology?
- What are the grand challenges for accelerators and what do we need to solve them?
- Can we identify trends or directions for new technologies and concepts?

Every participant is asked to prepare a 15 minute talk on her/his “view on future accelerators/concepts”. There will be no proceedings of the F3iA workshop. However, we ask the participants for voluntary contributions to a common white paper, that will be edited by R. Assmann and F. Zimmermann and that will summarize the outcome of this workshop.

Tentative program

Monday Dec 5

16:00 R. Assmann, F. Zimmermann: Welcome and Goals of F3iA

16:15 F. Zimmermann: Going Big - The FCC and beyond FCC

16:45 Discussion: Applications and limitations for going big (practical and physics)

17:00 R. Assmann: Going Small - Micro, Nano Accelerators and Beyond

17:30 Discussion: Applications and limitations for going small (practical and physics)

17:45 R. Brinkmann(DESY): View on future accelerators/concepts

18:00 Discussion

18:30 Adjourn

Tuesday Dec 6

Focus: Colliders

09:00 Andrei Seryi (JAI): View on future accelerators/concepts

09:15 Discussion

09:30 Stephen Brooks (BNL): View on future accelerators/concepts

09:45 Discussion

10:00 Katsunobu Oide (KEK): View on future accelerators/concepts

10:15 Discussion

10:30 Coffee

11:00 Daniel Schulte (CERN): View on future accelerators/concepts

11:15 Discussion
11:30 Valerie Lebedev (Fermilab): View on future accelerators/concepts
11:45 Discussion
12:00 Group picture
13:00 Lunch

Focus: Colliders

14:00 Matthew Wing (UCL/DESY): View on future accelerators/concepts
14:15 Discussion
14:30 Marica Biagini (INFN): View on future accelerators/concepts
14:45 Discussion

15:00 Brainstorming Session Colliders

16:00 Coffee

Focus: High Power/Intensity

16:30 Maurizio Vretenar (CERN): View on future accelerators/concepts
16:45 Discussion
17:00 Oliver Boine-Frankenheimer (TU Darmstadt and GSI): View on future accelerators/concepts
17:15 Discussion
17:30 Giuliano Franchetti (GSI): View on future accelerators/concepts
17:45 Discussion
18:00 Adjourn

Wednesday Dec 7

Focus: Photon Science

09:00 Hans Weise (DESY): View on future accelerators/concepts
09:15 Discussion
09:30 Hitoshi Tanaka (SPring-8): View on future accelerators/concepts
09:45 Discussion
10:00 Daniel Ratner (SLAC): View on future accelerators/concepts
10:15 Discussion
10:30 Coffee
11:00 Shaukat Khan (University Dortmund): View on future accelerators/concepts
11:15 Discussion
11:30 Anke-Susanne Müller (KIT): View on future accelerators/concepts
11:45 Discussion

12:30 Lunch

14:00 Brainstorming Session Photon Science

Focus: Accelerator R&D

15:00 Massimo Ferrario (INFN): View on future accelerators/concepts
15:15 Discussion
15:30 Brigitte Cros (University Paris Sud): View on future accelerators/concepts
15:45 Discussion
16:00 Coffee
16:30 Ulrich Dorda (DESY): View on future accelerators/concepts
16:45 Discussion

17:00 Alexander Pukhov (University Düsseldorf): View on future accelerators/concepts
17:15 Discussion

17:30 Brainstorming Session Accelerator R&D

18:00 Adjourn

Thursday Dec 8

09:00 Luca Serafini (INFN): View on future accelerators/concepts

09:15 Discussion

09:30 Markus Schwarz (KIT): View on future accelerators/concepts

09:45 Discussion

10:00 Frank Zimmermann (CERN): View on future accelerators/concepts

10:15 Discussion

10:30 Coffee

11:00 Ralph Assmann (DESY): View on future accelerators/concepts

11:15 Discussion

12:30 Lunch

14:00 Brainstorming Session Future Frontiers (and any additional contributions)

16:00 Excursion

Friday Dec 8

09:00 Brainstorming Session Future Frontiers (and any additional contributions)

10:30 Coffee

11:00 Discussion Session White Paper

12:00 small Lunch