

## Minutes

# ICFA Meeting

15/16 April 2025

Agenda: <https://indico.fnal.gov/event/67205/> (password: ICFA2025)

### Present:

- ICFA members: P. Campana, F. Gianotti, P. Sphicas, R. Teuscher, G.G. da Silveira, Shoji Asai, T. Nakaya, J. Cao, N. Roe, Y.-K. Kim, S. Dasu, U. Egede, T. Schörner (secretary)
- for the ICFA panels (part-time): T. Roser, Y. He, K. Lassila-Perini, T. Nakada
- for C11: Marcelo Munhoz
- guests (part-time): M. Ishino

**Not present / excused:** B. Mohanty, B. Heinemann, I. Koop, V. Obratsov

## 1) Welcome and Charge

Pierluigi first introduced the updates to the ICFA membership and welcomed Y.-K. Kim, thanking their predecessors for their contributions to ICFA.

Finally, Pierluigi reminds ICFA of the panels and their chairs, and of the agenda of the meeting.

## 2) Regional and Lab Reports

### CERN and FCC

Fabiola Gianotti presented the slides attached to the agenda.

- Pierluigi asks about the FCC Feasibility Study final report – a great achievement, congratulations to CERN. Are there any changes w.r.t the mid-term report? Fabiola answered that there were first and foremost changes on the injector's location, layout and power consumption, progress on the site studies indicating that the used 3D geological model is sound, and progress in (and significant reduction of) the projected electricity consumption for the hadron machine. There was also progress on the project governance and on the funding model.
- Pierluigi asked also about the size of the tunnel (diameter 5.5 m) – Fabiola answered that this size has been confirmed to be fine also for the hadron collider.

### ECFA and ESPPU

Paris Sphicas presented the slides attached to the agenda.

### USA

Y.-K. Kim presented the slides attached to the agenda.

- Tatsuya asked about implications of change in administration for DOE funding and related concerns. Young-Kee answered that the budget request will likely come out in May – then one might know. This week there was an announcement by DOE of a reduction of overheads to 15% - which will affect the universities but not (directly) the national labs. In terms of the 2025 budget, there are concerns, and some lobbying is going on (DOE, senators and representatives from both parties, etc.). The secretary of energy certainly values the FNAL and HEP research.
- Pierluigi asked about the first run of Mu2e in 2027 – does this clash with the shutdown for the upgrade of the injectors? How confident can Mu2e be to get data before the shutdown? Young-Kee answered that schedules are being scrutinised – by the end of April there will be a clearer plan and overview.

## China

Jun Cao presented the slides attached to the agenda.

- Fabiola asked about the timeline of the second selection round. When will a government decision be taken (5-year plan for 2026-2030, and start expected for 2027)? And: Yifang mentioned that a certain region had pledged to fund the construction of the tunnel – was this Henan, or was this another region? Jun answered that the selection round will start in 1-2 months, and CAS input to the plan would be expected for the end of 2025 or early 2026. And yes – it is the Henan province that promised some funding for R&D and for construction also. However, even if Henan is willing to give money, it requires government approval
- Tatsuya asked about the JUNO energy resolution. Jun answered that 3% seem realistic with the liquid scintillator replacing the water.
- Pierluigi asked about BESSIII – what is the time plan for the operation of the machine? Will CEPC construction interfere with BEPC-II running? Jun answered that he does not yet know. BEPC-II might run until 2030, but this has not yet been discussed with CAS.

## Japan and IDT

Tsuyoshi Nakaya and Tatsuya Nakada presented the slides attached to the agenda.

- Pierluigi asked about the SuperKEKB luminosity and congratulates on the lumi world record. Can one take good data with this luminosity, without too much background in the forward direction? Tsuyoshi said that it is a kind of machine exercise record, but providing important insights into the operation. And anyhow at this luminosity, the vertex detector is shut down.
- Pierluigi asked about the political landscape for the ILC. Shoji answered that after the latest elections the political situation is more complicated than before.
- Pierluigi stated that the ITN is currently the important part since it keeps the technical community together on the things that would need to happen for a linear collider to be realised. Anyhow, at a certain point the status and role of IDT within ICFA needs to be discussed.
- Paris asked about the connection between ILC and the LCF@CERN proposal. Tatsuya answered that the connection is totally informal – just many people that contributed to the CERN proposal are also IDT members. However, some IDT information is used – e.g. the accelerator technology (SCRF etc.). The cost estimate for the accelerator part took over the ILC costing and ported it to CERN. The infrastructure part was not used from ILC, but was done autonomously at CERN.

## Oceania, Australia and Asia beyond China, Japan and India

Ulrik Egede gave a brief oral presentation (no slides in INDICO). The main points were the following:

- The ACFA activity since the last ICFA meeting has been slow. A meeting has been scheduled for June, and the topic will be how to make benefit of the structure created.
- Vietnam discusses joining Hyper-K, which Australia did in 2024.
- Taiwan is displaying a whole set of activities. The LHCP conference is taking place in Taipei in May 2025. There is also a heavy ion conference in September, and Taiwan will be hosting the AEP SHEP school for its next iteration.
- The Australian research council funding scheme is currently undergoing a complete change, changing each funding stream. This is under review – from proposals out so far it is very hard to judge how it will affect HEP. There is e.g. discussion about industrial involvement in proposals. It is currently unclear how to account for international projects in the new scheme – one needs to have a close eye on things for the coming 6 months in order to judge how to best fare with HEP in the future.

## Latin America

Gustavo Gil da Silveira presented the slides attached to the agenda.

- Pierluigi Campana asked about the setting up of LACFA. Does LA plan to have representatives from institutions and laboratories in LACFA? Gustavo answered that the ICFA model might serve as blueprint – with country and lab representatives.
- Thomas asked about the embedding of the EDM4HEP efforts into key4HEP.

### **Canada**

Richard Teuscher presented the slides attached to the agenda.

- Pierluigi added that Canada joined ESFRI recently.

### **C11**

Marcello updated ICFA on C11 developments. In particular, concerning ICFA, C11 is asked to provide support with the request by IUPAP to consider the recommendations of the recent evaluation (see below). C11 recognizes the crucial role of ICFA for HEP and the importance of having IUPAP support for its activities

## **3) ICFA Panel Business**

### **ICFA Beam Dynamics panel**

Yuan He presented the slides attached to the agenda.

- Pierluigi pointed out that the panel membership needs to be refreshed, with an eye to younger people and diverse gender representation.
- Thomas asked about relocating the BD panel web pages to the central ICFA site. This question needs to be further considered (for all panels).

### **ICFA IID panel**

Marcel Demarteau presented the slides attached to the agenda.

- Pierluigi asked about the ICFA school 2025 – this is still pending? Marcel answered that yes – the 2025 one is still pending. For the proposal from Morocco, it is unclear whether there is enough time to organise the school there thoroughly. The Turkey place also proposed 2026 – but the decision is up to the new chair. One way would be to go to Turkey in 2026 and do Morocco in 2027.
- Pierluigi pointed out that IUPAP-ICFA funds could be used for the first time to sponsor the ICFA IID prizes.
- Sridhara pointed out that fundraising in memory of Ian Shipsey might be a worthy endeavour, or naming the IID prize after Ian. In the discussion, it is pointed out that also a fellowship in memory of Ian is under way at Oxford.

### **Other panels**

Thomas presents input received from the ANA, Sustainability, and Data Lifecycle panels (slides in INDICO).

## **4) ICFA Executive Meeting (not for publication)**