

## Minutes of WP-meeting 302

### Attendance:

DESY: Ralf Diener, Ulrich Einhaus, Leif Jönsson, Claus Kleinwort, Uwe Krämer, Volker Prah, Oliver Schäfer

Vidyo: Paul Colas, Qi Huirong, Jochen Kaminski, Tomohisa Ogawa, Ron Settles, Jan Timmermans

### General News:

Jochen started the discussion on the statement of the Japanese government and several opinions were raised:

- Ralf mentioned, that Joachim Mnich, who is also part of the ICFA, attended the ILC-project meeting at DESY last Monday and stated his view, that the ILC is not dead, but that the Japanese needed only another loop in administrative iteration.
- Paul was disappointed, that there was not a clearer support by the Japanese government. He said that it will be very difficult for him to find support from now on. There were many discussions at Saclay, because there are several open projects besides the ILC (among others CLIC, CEPC, FCC-ee) which will now catch up and the big advantage of the ILC, that it is a well developed project, will not be given anymore. Though Maxim is still very optimistic, the situation will be very difficult to get any money for ILC related research. On March 25 there will be a Saclay information meeting to explain the situation and discuss what could be the reaction of the ESG to the MEXT communication.
- Ron mentioned that Keisuke had sent an email to the ILD-physics group with a link to a statement given by KEK (<https://www.kek.jp/en/newsroom/2019/03/13/2100/>) which is rather positive and states that Japan will now start with the official negotiations. MEXT has also contacted KEK to get a better idea of what could be asked from which negotiation partner.
- Keisuke forwarded the following statement: "Sorry for not being able to attend the WP meeting. I understand that the March 7th MEXT message was rather disappointing to most of you who don't know the Japanese system, but I must say that in Japan MEXT's effort is highly appreciated. I think Maxim knows the system and that's the origin of his optimism.

There are several points. The first and most important fact is that this is the first time in the history that the Japanese government officially expressed its interest in the ILC.

Notice also that the message was from MEXT but based on coordination with many other relevant ministries and agencies. This point was made clear by Mr. Isogai, the Director General of MEXT Research Promotion Bureau, after his presentation at the LCB meeting in his press conference. It is a remarkable progress that the government as a whole, including the ministry of finance, allowed MEXT to express its interest in the ILC and move forward to start official discussions with other countries. Notice that there is already an official channel between MEXT and DOE (though without a clear ILC tag). Mr. Isogai said he's thinking about initiating similar framework with European countries. I hope that this kind of activity will become visible shortly. He said "It's continuation, but the discussion is moving forward to the next stage."

As for the "Master Plan" process, it was suggested in the December 19th SCJ report that if more extensive discussion is needed for the ILC, the "Master Plan" process would be an appropriate place. I assume that the Japanese government, having tendency to heavily value formality in due process, could not ignore this. The "Master Plan" process is very different from the SCJ committee on the ILC chaired by Mr. Iye, which was an ad hoc committee set up in a very short period upon MEXT's request. The SCJ updates its "Master Plan" regarding large-scale research facilities and research projects every three years. This involves all the academic fields. It is to systematically list up large-scale projects that are needed in individual academic fields from mainly academic significance point of view. The

resultant two lists (long and short) will be an input for MEXT to make its “Roadmap”. The deadline for application is March 29, 2019. According to the provisional schedule, the long list (more than 100 projects) will be made probably in June, 2019 and the short list (30 or so projects) will be made probably in October, 2019. Final approval of the Master Plan is probably around January, 2020. This time, I believe, the relevant selection committees involve real HEP experts unlike the one chaired by Mr. Iye.

It is at this point not very clear how the ILC, which is different in many ways from other projects, will be handled in the process, but the selection will be made in any case only from projects with top priorities given by the individual fields; in 2017 JAHEP’s future project plan, the ILC is No.1 and HK is No.2. I think we can turn this into our opportunity to officially get the support as required by the Iye committee from other academic fields.”

- Huirong did not see any impact of the statement on the development of CEPC. There were three meetings this week, one on calorimeters (E-CAL and H-CAL), cavities and magnets. This indicates the emphasis the Chinese research ministry put out for the close future. All of these projects are generic R&D and not only for the CEPC.

- Jan mentioned, that it will be important that many people attend the Lausanne meeting to show the unbroken interest in the detector.

Paul also mentioned last weeks announcement of the FCC project, which is planned for 17 billion €/€\$ and will last for up to 80 years.

- At some meeting an unofficial slide with a timeline was shown. Here a decision was assumed for mid-2020, which was caused by the development of the Japanese Masterplan of the SCJ.

### **A positive interpretation of the statement is as follows:**

The Japanese government has sent a high ranking official from MEXT to the ICFA to express its appreciation of the project and to convey its status in the decision making process. It is the first time that the complete Japanese government including the Ministry of Finance is manifesting its interest in the ILC. The statement gives a green light to official negotiations with other governments in particular the US, France and Germany. The internal process of decision taking was delayed by the SCJ suggestion to evaluate it ILC in the next Roadmap/Masterplan.

### PCMAG/LP setup, test beam:

Ralf: PCMAG/TRACI/test beam area:

- Ralf summarized the latest additions to the test beam area: there are a new gas cabinets, a new gas system, a target for double track studies, the connections between the hut and the area have been recabled and also the infrastructure of the hut was improved. All relevant sensors were also linked to the DESY safety system and a new access system was installed. It is not possible to bridge the safety lock for short access. Only the safety lock of the PCMAG can still be bridged.
- The test beam schedule for this year is in principle full, only very few slots are available where parasitic operation of T24/1 would be possible.
- Ralf also summarized the test beam workshop from 2017. He stated, that most users are very happy with the test beam and there is a strong support from the user community to continue it. Some improvements have been suggested regarding higher luminosity, flat-top mode and extraction of the primary beam via resonant extraction. These options are being investigated. The most important issue is the upgrade of Petra 3 to Petra 4, when the injectors beam line has to be upgraded. In this context, the continuation of the test beam is not yet secured. But the test beam coordinators are strongly lobbying for the continuation and even for upgrading the test beam. For example a 4<sup>th</sup> beam line, with a pion and muon test beam is under discussion.

News from the groups:

Huirong pointed out that there will be a CEPC Workshop at Oxford from April 15<sup>th</sup> to 17<sup>th</sup>. He asked, if someone from the pixel group could give a presentation on the pixel readout.

Jan reported that a new detector with 8 QUADs, in total 32 GridPix detectors, has been built and is tested. The readout of 32 GridPixes is not possible yet, but is worked on. All QUADS were tested in common for HV. Laser beam tests have started on individual QUADS.

AOB:

Ralf and Oliver are organizing the gas detector contribution for the EDIT school in 2020 at DESY, planning so far <sup>55</sup>Fe spectrum measurements and gain measurements using CUMOS, both with GEM chambers. Contributions and ideas for small projects -software or hardware, doable in a day or an afternoon- are very welcome. A test beam line would be available.

The next workpackage meeting will take place on March 28<sup>th</sup>.