ICFA Neutrino Panel phone meeting #11 20-Oct-2014 13:00 UTC

London	20-Oct-2014 14:00 BST	UTC + (01:00
Beijing	20-Oct-2014 21:00 CST	UTC + (00:80
Chicago 🔽	20-Oct-2014 08:00 CDT	UTC - (05:00
Madrid	20-Oct-2014 15:00 CEST	UTC + (02:00
Mumbai	20-Oct-2014 18:30 IST	UTC + (05:30
Padova	20-Oct-2014 15:00 CEST	UTC + (02:00
Paris	20-Oct-2014 15:00 CEST	UTC + (02:00
Sao Paulo 🏲	20-Oct-2014 10:00 BRST	UTC - (00:80
Seoul	20-Oct-2014 21:00 KST	UTC + (00:80
Tokyo	20-Oct-2014 22:00 JST	UTC + (09:00
Vancouver 🔽	20-Oct-2014 06:00 PDT	UTC - (07:00
Wroclaw	20-Oct-2014 15:00 CEST	UTC + (02:00

Present: D. Duchesneau, S. Geer, T. Kobayashi, K. Long, M. Maltoni, M. Shiozawa,

H. Tanaka, M. Wascko

Apologies: J. Cao, R. Funchal, A. de Gouvea, S.B. Kim, M. Mezzetto, N. Mondal,

J. Sobczyk, G. Zeller

Notes:

1. Introduction and adoption of agenda

ΑII

KL commented that to take the road-mapping and other work of the Panel forward would require more email exchange because the time differences made the use of telephone calls sometimes inefficient

Good progress is being made on the definition of the LBNF programme. An interim International Executive Board (iIEB) had been formed with a brief to guide the production of the LoI and seed the creation of the collaboration. A draft of the LoI is circulating within the Board and Terms of Reference for the iIEB have been drafted defining the end of its existence when the collaboration and its structures are in place.

KL had been asked by N. Lockyer whether the Neutrino Panel could take in interest in a new national advisory panel that is being discussed by HEPAP to advise on national strategy in US PP (i.e. considering areas funded both by NSF and DOE). KL had replied that the Panel would be able to take an interest; involvement would depend on the role, if any, eventually proposed.

Exchanges with ApPIC chair M. Spiro circulated, important now to offer dates so that organisation of meeting can begin.

2. Notes on recent meetings and actions arising:

- Notes circulated:
 - To receive comments and corrections.
- Status of actions:
 - AdeG/SG: Generate a draft NBB/WBB document by 15Sep14 which would then be circulated for comment to the Panel.
 - Done.

- All: Consider how best to engage with principals of the various collaborations in order to define the chunks of the supporting and R&D programmes.
 - Agenda item 5.
- o **All:** Contribute to listing all relevant funding agencies and laboratories.
 - Agenda item 4.
- All: Contribute to the development of a list of key questions for the funding agencies/labs.
 - Agenda item 4.
- KL: Catalyse the production of a list of the principal experimental and stakeholder groups.
 - Agenda item 5.
- KL: Identify volunteers to lead discussion with the various stakeholder or experimental groups (ideally Panel members would take the lead with a subset of these).
 - Postponed to after we've discussed agenda item 5.
- o **All:** Consider pros and cons of initiating a review of our initial report.
 - Agenda item 6.
- KL: to create a Doodle for our next Panel meeting in October.
 - Done.

2. Dates and possible venue(s) for joint ICFA nuPanel/ApPIC meeting

To make progress on definition of this meeting.

After discussion of conflicts and possibilities we agreed to offer the following dates:

- 23Feb15—25Feb15;
- 02Mar15—06Mar15: and
- 09Mar15—13Mar15.

[Note added: I've passed these dates on to M. Spiro and am awaiting comment].

We discussed the possible venue and acknowledged NM's offer of Mumbai as the venue. We felt that the ApPIC members might also have preferences on location and therefore **agreed** that the Asian members of the Neutrino Panel would engage with their opposite numbers on ApPIC to agree the venue.

[Note added: I've passed on this proposal to M. Spiro too.]

Other points were noted during the discussion. The meeting should focus on combined or programmatic aspects of the large detector/accelerator-based programmes. The meeting should be similar to the ApPEC meeting in its goals and should include discussion of detector R&D as well as gravitational wave and ultra-high-energy cosmic ray detection. In the funding-agency considerations, discussion of the overlap/non-overlap and synergies in the funding for the science programmes should be included.

We also noted that the timing of the meeting was such that we should use it to agree the content of the report on the second year of our activities.

3. Status of "benefits" document: KL

To understand status of editing the document;

Draft had been circulated and comments had been received. KL had strong prejudice to compress to two pages. Plan to merge comments and compress and send around for final comments in roughly one week. **Action: KL.**

4. Discussion of initial list of questions for FA/lab discussions: All

 To identify some of the questions we need to ask and a process to gather a complete list.

This item was taken together with the following item. Notes are reported there.

5. Discussion of key stakeholder groups by with which to define RD programme: All

To initiate discussion and perhaps identify leads for various areas.

At the last meeting a worked example of the Hyper-K roadmap had been presented. We **agreed** that this model should be developed (KL) to include LBNF and other programmes. The most effective approach was felt to be that a draft is made for criticism. The roadmap created in this way would naturally lead to the definition of time frames for the supporting programme.

We discussed the development of the content of the supporting programme. KL reported discussions with those involved in Hyper-K and LBNF. The consensus that seemed to emerge was that existing groupings should be exploited to get the input needed to define the programme. The target groups that we discussed were:

- NuSTEC: for cross sections:
- NuInt: for neutrino interactions including the hadro-production programme necessary to understand the flux;
- NNN: for the detector R&D requirements; and
- NuFact: for the accelerator R&D. In the case of accelerator R&D discussion with the relevant laboratories should also be undertaken.

We **agreed** that our goal would be to have straw-man drafts of the roadmap and RD programme by the meeting with ApPIC. These could then be refined for presentation in our second-year report.

Separately, it had been indicated that the US-based experiment spokespersons, at least those leading US-based experiments, would welcome a forum in which they can exchange issues. We discussed the concept of a Panel-initiated meeting and agreed that it could feed into the definition of the RD programme. Target could be November. **KL** to take forward in parallel to the roadmap and RD steps noted below.

We had not had success in defining questions or lists of lab directors. We **agreed** to distinguish two classes of labs: those that are directly providing infrastructures for the programme and others that are contributing. We **agreed** that armed with the straw-man roadmap and RD programmes, the discussions with the lab directors and funding-agency representatives were likely to become easier to define.

Principal action: KL: catalyse production of relevant documents, pulling in effort from Panel members as required.

6. Inviting constructive criticism from peers outside the neutrino community: All

• To consider inviting a review of our initial report and other means of engaging with the non-neutrino peer group.

We discussed the pros and cons of soliciting a review of the Initial Report. We discussed submitting it, or sections 1 through 4, for publication and soliciting opinions from selected leaders of the collider community. No procedure seemed to fit well.

We noted that the objective was to test the strength of the physics case and the way in which we communicated it. So, in the end we **agreed** that it was more appropriate to offer the motivation section or sections of our second-year for review and to set up an appropriate mechanism in advance of completing the report.

7. DONM

Agreed to develop roadmap and RD programme as well as the ApPIC meeting by email as described above and meet in December. **KL** to set up a Doodle.

SG noted that time was passing and it was now urgent to make progress on the work of year 2.

8. AoB

None.

Summary of actions:

- **KL:** Complete revision of "complementarity" document;
- **KL:** Communicate Panel's date and organisational preferences to ApPIC;
- KL: Catalyse creation of initial draft of straw-man roadmap;
- **KL:** Catalyse production of initial draft of straw-man RD programme;
- KL: [Added] initiate contact with NuSTEC, NuInt, NNN re RD programme;
- **KL:** Liaise to see if neutrino-experiment-spokesperson meeting would be welcome:
- **KL**: Set up Doodle poll for Panel phone meeting in December

Reminder of our goals for our second year:

- 1. Engage with establishment: FA reps and Directors;
- Develop road-map for InuP;
- 3. Develop proposal for RD programme;
- 4. Explore opportunities for international collaboration necessary to realise NF
- 5. Establish clear set of goals for the precision with which \nu_\mu and \nu_e cross section measurements must be made;
- 6. Initiative to promote best practice in s/w & codes;