

# Report on the 8<sup>th</sup> Dissemination and Exploitation Board Meeting

**General Presentation – Zagreb (Croatia) – 23<sup>rd</sup> of October – 11h00 - 12h30**

**The Chair, Tord Ekelöf**

**Aysel Kayis Topaksu**

**Marcos Dracos**

**Georgios Fanourakis**

**Eliane Bouquerel**

**Marie-Laure Schneider**

**Colin Carlile**

**Kjell Grundström (absent)**

## Agenda

- 1. Yearly special seminar in Lund 26 March 2019 – Progress status**
- 2. Intensity Frontier Physics workshop 2-3 March 2020 – Progress status**
- 3. Dissemination activities:**
  - List of neutrino conferences in 2020**
  - Feedback on past international conferences**
- 4. Video project – Progress status**
- 5. Any Other Business**

## 1. Yearly Special Seminar – Progress Status

**As discussed during the last DEB meeting, it was decided to organise the Yearly Special Seminar in Lund, 26 March 2020.**

**The event will be split in two parts:**

- **The public meeting will be organised at the International School in Lund.**
- **14:30-16:00 for students and 17:00-18:30 for the general public**
- **Representatives of the Lund local authorities (commune) to be invited**

## 2. Intensity Frontier Physics workshop

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# Prospects for Intensity Frontier Physics with Compressed Pulses from the ESS Linac

Workshop at Uppsala University 2-3 March 2020.

**Local organizing committee:**

**Maja Oivegard, Tord Ekelof, Colin Carlile, Ye Zhu, Han Li, Rocio Santiago Kern**

**International Advisory Committee**

**Mats Lindroos / ESS, Alain Blondel / Genève U, Chris Prior / RAL, Silvia Pascoli / Durham U, Jean-Pierre Delahaye / CERN, Mark Palmer / BNL, Lia Merminga / FNAL, Sara Cousineau/ SNS , Kasou Hasagawa/ J-PARC, Shang Wung/ CSNS**

## 2. Intensity Frontier Physics workshop

**From the invitation letter:**

**“The use of the ESSnuSB accumulator ring will make possible a number of different physic experiments, in addition to the ESSnuSB experiment, such as nuSTORM, Neutrino Factory,  $\mu+\mu-$  Collider, pion Decay at Rest, Coherent  $\nu$  and Short Pulse Neutron Physics. The pulse length can be adapted to the optimal length for each of these experiments, making use of slow ejection to obtain pulses longer than  $1.3 \mu\text{s}$  and of creating very short high-frequency gaps in the  $\text{H}^-$  pulse in the linac to produce pulses shorter than  $1.3 \mu\text{s}$ . The purpose of the workshop is to present the current planning for the different types of experiments here mentioned and the possibility of performing them in future with the use of the ESS linac and the planned accumulator ring.”**

## 2. Intensity Frontier Physics workshop

**Monday 2 March 2020**

**14:00–14:05 Welcome & Introduction to the Workshop/ Tord Ekelof**

**14:05–14:45 The use of the ESS linac to create a Muon Collider/ Carlo Rubbia**

**14:45–15:15 The ESS neutrino Super Beam Design Study/ Marcos Dracos**

**15:15–15:30 Discussion**

**15:30–16:00 Coffee break**

**16:00–16:30 The prospects for nuSTORM at ESS/ Alan Bross**

**16:30–17:00 The prospects for an ESS based Neutrino Factory/ Jaroslaw Pasternak**

**17:00–17:30 The possibilities of Decay-at-Rest experiments at ESS/ Janet Conrad**

**19:00–23:00 Conference dinner**

## 2. Intensity Frontier Physics workshop

**Tuesday 3 March 2020**

**09:00–09:30 Coherent scattering experiments possible at ESS/Kate Scholberg**

**09:30–10:00 Short Pulses for neutron Physics at ESS/ Ken Andersen**

**10 :00–10:30 The ESS Linac Modifications required for the Different Proposals/  
Natalia Milas**

**10:30–11:00 Coffee break**

**11:00–11:30 Design of the ESSnuSB accumulator/ Ye Zou**

**11:30–12:00 Accumulator Synergies and Differences for the Different Proposals/  
Maja Olvegard**

**12:00–12:30 Discussion**

**12:30–14:00 Lunch**

**14:00–14:30 Target Synergies and Differences for the Different Proposals/ Eric  
Baussan**

**14:30–15:00 Space available at the ESS site for the new installations/ Karin  
Wennerholm**

**15:00–15:30 Discussion & Closing**

## 3. Important neutrino conferences 2020

### List of international neutrino conferences in 2020

1. The 11th International Particle Accelerator Conference (IPAC'20) 10 to 15 May , 2020, Caen, France <https://www.ipac20.org/>
2. 1st PAN Neutrino Theory Symposium : Particle, Astro, and Nuclear Physics Topics in Neutrino Theory 11-13 May 2020. Arlington, VA,USA <https://indico.phys.vt.edu/event/40/>
3. Extended Workshop NUTs (Neutrino Theories) 2020 (NUTs2020) 25 May - 26 Jun 2020. Madrid, Spain <https://workshops.ift.uam-csic.es/NUTs2020>
4. 29th International Conference on Neutrino Physics and Astrophysics (Neutrino 2020) 21-27 Jun 2020. Chicago, Illinois, USA <http://conferences.fnal.gov/nu2020/>
5. 40<sup>th</sup> International Conference on High Energy Physics (ICHEP2020) 30 Jul - 05 Aug 2020. Prague, Czech Republic <http://ichep2020.org>
6. International Workshop on Neutrinos from Accelerators (NUAFCT2020) 24-29 August 2020, Cagliari, Sardinia, Italy <https://indico.cern.ch/event/855372/>



### 3. Recent neutrino conferences with ESSnuSB presentations

#### Feedback on recent international conferences

- 1. EISA, Applications, Workshop on Connecting Insights in Fundamental Physics: Standard Model and Beyond, 31 August-11<sup>th</sup> September 2019, Corfu, Greece.**
  - **Marcos Dracos**
- 2. TAUP 2019, 16<sup>th</sup> International Conference on Topics in Astroparticle & Underground Physics, 9-13 September 2019, Toyama, Japan.**
  - **Eirik Gramstad**
- 3. R&I Days, European Research & Innovation Days, 24-26 September 2019, Brussels, Belgium**
  - **Colin Carlile**

## 3. Recent neutrino conferences with ESSnuSB presentations

### 4. J-PARC Symposium 2019, 23-26 September 2019, Tsukuba, Japan.

- Tord Ekelof

### 5. PPNT 2019, Workshop on Particle Physics with Neutrino Telescopes, 7-9 October 2019, Uppsala, Sweden.

- Mattias Blennow and Tord Ekelof

### 3. Follow-up of Dissemination activities

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#### Request regarding international events:

- In order to keep the project website lively, it would be useful if participants at International Conferences could take pictures featuring themselves or other ESSvSB participants presenting the project and send them to Marie-Laure (to be published on the website).

## 4. Video project – Progress status

- **The project officer has given the green light to finance the ESSnuSB video.**
- **We currently have two offers for the ESSnuSB video, one from the Phosworks company which has been making videos for Uppsala University and one from the SWECO company which has been making videos for ESS.**
- **Both companies have made offers on the level of 20'000 EUR for a 3-4 minutes ESSnuSB video based on both animated and real film material.**
- **We need to make a short script for the video and ask the two firms to elaborate on how they would proceed**

## Next DEB meeting

- **3<sup>rd</sup> of December 2019 at 13h30**