

Summary Record

The twenty-ninth meeting of the HEPTech Board was held at CERN in Geneva, on December 2nd 2022.

List of participants

	Name	Institution	Present	Proxy	Right of vote
1	ANDERSEN Jimmy	ESS (Sweden)	Yes		Yes
2	BAIN, Elizabeth	STFC (UK)	Yes		Yes
3	BARONE, Michele	Demokritos (Greece)	Yes		Yes
4	BAUER, Martina	GSI (Germany)	Yes		Yes
5	BRENNAN Liam	STFC (UK)	Yes		No
6	BERECKZEI David	ELI-ALPS, (Hungary)	Yes		Yes
7	ANELLI Giovanni	CERN (Switzerland)	Yes		Yes
9	LANZA, Agostino	INFN (Italy)	Yes		Yes
11	VENTURI Valentina	HEPTech	Yes		No
12	SORIN Mariou	IFIN-HH	Yes		Yes
13	DOBREV Bojil	Sofia University	Yes		Yes
14	HALA Ales	Eli Beams (Check Republic)	No	BERECKZEI David	Yes
15					
				Total rights of vote	10/14

The meeting was called to order at 09.35 a.m. (CET) with the following agenda:

1. **Quorum and proxies**
2. **Approval of the Agenda**
3. **Approval of the last Board Meeting minutes**
4. **Actions from June Board meeting**
5. **Report Finances & Expenses**
6. **Boar Papers**
7. **Communication activities**
8. **Discussion topic:**
9. **Nominations for Chair**
10. **Location of June Board Meeting**
11. **Future Finance**
12. **Best practice Workshops**
13. **AOB**

SUMMARY

1. Quorum and proxies

The following members were absent:

- Jose Carlo Rasteiro (LIP, Portugal)
- J. Jadlovsky (University of Kosice, Slovakia)
- Maria Mavri / Ioannis Gkialas (University of Aegean, Greece)

Ales Hala from ELI Beamline was represented by David Bereczei ELI ALPS.

E. B declared that the quorum of two thirds of the members had thus been reached.

The new number of members institution is 14.

2. Approval of the agenda

The agenda of the June Board Meeting 2022 was approved.

3. Approval of the last Board Meeting minutes

The June 2022 Board Meeting minutes were approved.

4. Actions from June Board meeting

L. Brennan exposes the actions taken since the Board Meeting June:

- Revisit and circulate several different options for Mission statement.
- Circulate a list of potential institutions to approach to join the network also be circulated for comment.
- Check Terms of Reference for Communications officer rules amend and circulate if required.
- Wigner Check detail of AIME for CERN collaboration and resubmit AIME board paper with amendments.
- Gauge interest for joint AIME with EEN

5. Report Finances & Expenses

The finances were exposed by E. Bains, underlying the 22 987 CHF income from membership and explaining that in the report, the trip to Malmo in November 21 is taken into the finances, as well as the material expenses.

Date	Outgoings	Income	Detail	Total
2021		CHF 30,706.00	Carried Over End of 2021	
Nov-21	-CHF 930		Malmo Expenses	
Apr-22	-CHF 646		Cern Expenses	
Jun-22	-CHF 1,210		Prague Expenses	
Oct-22	-CHF 2,345		Granada Expenses	
	CHF 101		General Expenses	
Oct-22	-CHF 1,400		Heptreneurs Speakers	
Apr-22		CHF 22,987	Membership Fees	
Year 2022	-CHF 15,070		Communications Officer	
	-CHF 128		Communications Materials	
Dec-22	-CHF 21,626	CHF 53,693		CHF 32,067

In kind contributions: STFC, Demokritos, ELI - IFIN-HH, LIP in a respective value over: 7,

Membership fees are as well explained:

Membership 2023		Income	In Kind contribution
CERN	Apr-23	CHF 3,000	
TECHNICAL UNIVERSITY OF KOSICE	Apr-23	CHF 1,538	
UNIVERSITY OF THE AEGEAN	Apr-23	CHF 1,538	
INFN - Sezione di Milano Bicocca	Apr-23	CHF 3,075	
INSTITUTE OF PHYSICS AS CR, V.V.I.	Apr-23	CHF 1,538	
WIGNER FIZIKAI KUTATOKOZPONT	Apr-23	CHF 1,538	
UNIVERSITY OF SOFIA - FACULTY OF PHYSICS	Apr-23	CHF 1,538	
GSI HELMHOLTZZENTRUM FUR	Apr-23	CHF 1,538	CHF 1,538
EUROPEAN SPALLATION SOURCE ERIC	Apr-23	CHF 3,075	
ELI-HU .	Apr-23	CHF 1,538	
TECHNICAL UNIVERSITY OF KOSICE	Apr-23	CHF 1,544	
STFC		CHF 3,075	
LIP		CHF -	CHF 1,537
NCSR Demokritos		CHF -	CHF 1,537
ELI - IFIN-HH		CHF -	CHF 1,537
		CHF 24,530	CHF 4,611

A comment by A. Lanza on the actual name of the INFN institution: Laboratorio Nazionale Frascati. Lanza takes the chance to introduce his successor in 2023 for the INFN representation, Mariangela Castelli. He will remain at disposal for assuring a smooth transition.

The Finances are approved

The budget 2023 is approved.

6. Boar Papers

- BP: "Mission statement"

The new mission statement chosen by the Future of HEP Tech working group is presented by L. Brennan which underlines the need of having a shorter mission statement

"HEP Tech's mission is to support large-scale (high-energy) physics facilities to translate innovations into industry/community to generate economic, environmental, and social benefits. HEP Tech leverages the strengths of its institutional members to identify and exploit possible synergies within the network by voluntary supporting each member in their technology and knowledge transfer activities"

The BP "Mission Statement" is approved.

- BP: "GSI inkind contribution"

M. Bauer explains that GSI has interest in taking over with the organization of HEP Trepreneus series, but with a collaboration from HEP Tech. In order to face the costs of the organization and the speakers, GSI request to pay half the HEP Tech fee for this in-kind contribution.

Below the BP:

“GSI intends to continue the HEPTrepreneurs event series as the main organiser and host. The HEPTrepreneurs event series focusses on High Energy Physics Entrepreneurship and covers various themes. The inspirational and interactive talks, round tables and keynotes are made for all those interested in entrepreneurship, but also for young people who want to know more about alternative careers to research and for technology transfer officers looking for people to inspire. GSI will take the lead in the event organisation, but will continue to cooperate with HEPTech and the network to run the events. GSI plans to hold the event 4 times a year and will also cover any speaker costs that may arise. Participation in the events will continue to be free of charge for all HEPTech members and partners. In return GSI requests to reduce its contribution by half, from 3 kEUR to 1.5 kEUR. Start of the service: 01/2023 End: open”

The BP is approved

- BP: “GSI in-kind contribution”

E. Bains and M. Bauer explain the project of a two-days event to be held at GSI in autumn with tech talks, networking events, and panel discussions. The BP looks for the approval of a budget ranging from 6 kCHF to a max 18 kCHF. The hope is that pandemic won't ruin the plan.

M. Barone asks about the dates, and A. Lanza says that October would be better than September due to a high number of other events.

G. Anelli underlines the need of participation of each Member of HEPTech, and the need of finding a AI space that is uniquely brought by HEP. With Industry it will be easier to understand the value of the AI produce in HEP.

M. Barone points out that quantum technology is not included in the topics. A broad discussion arises around the request. Quantum Technology is of interest but as well a big topic.

J. Andresen comments on the fact that AI is a very broad topic, and it will be difficult to understand the value proposition of such a meeting.

E. Bains says that 3 people to come and speak at the event are not difficult to find for each of the HEPTech institutions, provided that the scientists are able to explain their techs to the industries.

M. Bauer says that in GSI is not yet clear if AI coming from HEP is of interest for industries and this event will be the occasion to test and understand better what industry needs.

E. Bains proposes to narrow down the focus and seek for a good value proposition to promote the event to industries

L. Brennan says that it is a challenge to understand what are the benefits for the members, where can AI be used and how it can be used.

More discussion on the importance of AI took place.

Details of the BP:

BP:

“All the HEPTech facilities use Artificial Intelligence (AI) in one shape or form, to improve and facilitate the reading of experimental results, calibrate our equipment etc. HEPTech AIME on AI & digital innovations is planned as a two-day event jointly organized by CERN (CH), GSI (DE), STFC (UK) and Enterprise European Network (EEN) featuring technical talks, networking and ‘business to science’ (B2S) matchmaking opportunities, industrial exhibition in the fields of research, methods, instrumental models and schemes, human impact and applications in industry. Bound together with the latest commercial aspects, patenting and licensing AI and data, the latest in EU AI and data regulation, open source

software licensing models and the different business models, environmental considerations, industrial needs and digital HEPTrepreneurs.

The AIME will bring AI & digital experts from industry and academia together to explore, connect, network and exchange ideas, such as:

- **Identify how research can provide solutions to current and future industrial problems.**
- **Connect researchers and industry, to explore the mutual benefit of collaborating.**
- **Inspire and learn about the latest in AI research, digital applications, and their legal frameworks from experts.**

The proposal is for a joint two day event run by the three HEPTech members CERN, GSI and STFC with small industrial expo. This would be hosted at GSI, Darmstadt, Germany with support from CERN, STFC and EEN as co-organisers.

HEPTech will provide a financial contribution and additional sponsoring and industrial exhibition incomes will support the costs of the event.

Other HEPTech nodes would be expected to contribute at least one speaker each, e.g. start-ups/spin-offs, inventors, scientists, industrial cooperation partners. Speakers contribution shall be a mixture of business and research background. Each HEPTech member is invited to be involved in the program committee and to be represented at the event in person. The EEN can provide the brokerage through B2S matchmaking for our HEPTech technologies. Other partners will be invited for example the ASTP Digital SIG would be a complimentary match.

Topics:

- AI Applications,
- AI & Ethics,
- Hybrid Modelling/Digital Twins,
- Machine & Deep Learning and Neuronal Networks,
- Data Analytics,
- Commercialising Open Source Software
- Patenting an AI invention

Event format:

Mix of lectures, panels, break out groups, matchmaking and industrial exhibition with a main issue to support networking of the participants.

Current Request:

GSI, CERN and STFC ask for approval of a financial support of the 'HEPTech AIME AI & Digital Innovations' in the amount of min 6.000 EUR and max. 18.000 EUR (3 members, 6k EUR each) to cover the catering and site costs depending on exhibition and sponsorship incomes.

A more detailed calculation will be available in June 2023. "

The Board paper was approved.

E. Bains ask the members for feedbacks on ideas for the meeting by end of January.

7. Communication activities

V. Venturi presents the communication activities done till December 2022.

HEPTrepreneur activities are presented, and she wonders why the attendance is only for the same 4- 5 institutions. She asks around why students from other institutions are not attending. M. Barone says that according to his experience the problem for Demokritos students is the schedule.

Valentina reminds the importance of the node on this internal communication inside the institutions. Each node knows his environment and how to make the event appealing.

E. Bais adds that HEPTrepreneurs invites high level speakers to be inspired by.

Some pictures of the Big Science Business forum 2022 in Granada are shown, where many members of HEPTEch had the occasion to meet and discuss. As well it was a good occasion to see what other networks do and offer. E. Bains also managed to attract interest by potential new members.

Internal communication was done through emails to the official mailing list of HEPTEch members, advertising internal and external events, newsletters and news.

The website has been kept up to date with the help of the unkind contribution of Adrian Ciciocenu from IFIN-HH. V. Venturi express the interest of having the possibility of monitoring the website accesses. As well she proposes a cleaning up of the website, she waits for INFN help to implements them.

The LinkedIn page had a slight growth V. Venturi reminds the members to post there any relevant event to advertise to the HEP community.

V. venturi says she has prepared a document explaining how deadlines and indico organization of events works for a potential person taking over, which might not be familiar with CERN systems.

8. Nominations for Chair

E. Bains asks around if there is a potential volunteer for the next chair. She was initially thinking that INFN could volunteer but A. Lanza will soon leave its role and this wouldn't be easy then.

9. Location of June Board Meeting

E. Bains asks for a volunteer to host the next Board meeting underlying the importance of the opportunity of seeing the other members institutions.

D. Bereckzei proposes Hungary as next location.

10. Future Finance

E. Bains explain that the financial situation is not as good as in the past and it would be better to look for other ways to finance HEPTEch, possibility that V. Venturi looks for some EU grants together with the help of M. Barone and other experts.

11. Best practice Workshops

Best practice workshops are very important and the number 1 activity according to the recent survey by members. E. Bains asks what interesting topics around the members could be.

G. Anelli says that sharing the methodologies among members is very useful, especially when failures are exposed.

12. AOB

E. Bains wonders what would be the impact of reducing to one the number of board meetings a year as they take her a lot of energy to be organized. After discussion it is decided to leave everything untouched and come back with suggestions for the next meeting.

E. Bains says that the Danish Institution of Technology has invited HEPTEch members to propose speakers to present their technologies at a conference in Bilbao.

The meeting finished at 11:45 CET