

Minutes Board Meeting (December 5-6, 2023) – Max-Planck-Institut für Kernphysik, Heidelberg & P11 Café Bar, Heidelberg

Present

Board members: Kristel Crombé (KC – Chair), Ken McClements (KMC - Hon. Sec.), Andreas Dinklage (AD), Basil Duval (BD), Eva Kovacevic (EK), Mervi Mantsinen (MM), Thomas Mussenbrock (TM), Brian Reville (BR), Catarina Riconda (CR), Carlos Silva (CS), Monica Spolaore (MS), Jörg Stober (JS), Vladimir Tikhonchuk (VT), Luca Volpe (LV: remote), Stefan Weber (SW)

Apologies

Hana Barankova, David Burgess, Andrea Ciardi (ACI)

EPS2023 PC and LOC chairs: Sebastian Le Pape (SP), Alexis Casner (AC)

EPS2024 PC and LOC Chairs: John Kirk (JK), LV

EPS2025 LOC: Reda Gaudiesiene (RG)

APS and AAPPS representatives: Ed Thomas (ET) and Abhijit Sen (AS)

PPCF Editor-in-Chief and Publisher: Jon Graves (JG: remote), Iain Trotter (IT: remote)

1. EPS 2023 conference – Bordeaux

1.1 Report from the LOC (AC)

AC commented that many individuals had helped him with local organization of the 2023 conference, and that he was particularly grateful to Sylvie Jacquemot (LULI). He reported that only 78 out of 740 paying delegates had paid the EPS member rate; most of these were early registrations. It was acknowledged that the conference website provider had been poorly chosen. AC commented that he had no secretarial support and emphasized the need for such support at future conferences. He said that some of the emails he had received relating to the conference were abusive. However there had only been a very small number of cancellations. The conference had made a profit of €63,897.47: AC proposed that €20,000 of this be sent to the EPS. JS asked AC whether he had metadata for the EPS2023 4-page papers; AC said that he did not.

1.2 Report from the PC (SP)

SP presented his final report on EPS2023. He commented that the PC had functioned quite well, with most members actively participating. There had been more than 230 invited and plenary nominations, 70 of which were for plenaries. Interestingly, a non-European country (USA) had the highest number of nominations. SP had no data on the gender balance of nominees. The March 2023 PC meeting was organized as hybrid, largely because of the impact of transport strikes. Not all PC members attended the conference itself. Only a few presenting authors cancelled their participation, but there were many requests for presentations to be scheduled for a particular day, and this was difficult to manage. 780 oral/poster abstracts were submitted, only 2 of which were rejected and 101 were selected as orals. A town hall-style meeting with a panel drawn

from public and private sector fusion was difficult to organize but was considered to have been worthwhile. BD commented that the lunches at EPS2023 were a disaster; SP agreed, and also acknowledged the shortcomings of the conference website. Around 5% of posters were presented in the wrong session. LV nevertheless congratulated the organizers for making the conference a success, despite many challenges, and apologized for having to cancel Salamanca as a venue for EPS2023 at short notice. EK also thanked SP for a successful conference, commenting that the scientific programme had been excellent. She suggested that in future years it may be prudent to have a back-up solution in place for the conference website to mitigate the risk of the provider going out of business. SP advocated having the same back-up solution in place from year to year. KMC commented that one speaker listed in the agenda had withdrawn their participation via email several weeks prior to the start of the conference, but this was not communicated to either the PC or the chair of the relevant session. Clearly such incidents should be avoided if possible since they risk reputational damage to both the cancelling speaker and the conference organizers. JG suggested that session chairs should be encouraged to check with the conference registration desk that all of the speakers for their session were present.

1.3 Report on the PPCF Special Issue (IT)

IT reported that 17 papers had been published (out of 18 submitted) in the special issue on plenary and invited talks at the EPS2022 conference. For the 2023 conference 11 papers had been submitted so far, of which 5 were still under review. It was suggested that confusion regarding the re-use of EPS abstracts may have affected the number of submissions, and for this reason it should be made clear to plenary and invited speakers that there will be no such issues in 2024. It is intended that details of the 2024 special issue will appear on both the EPS conference web page and the PPCF landing page early that year. It was proposed that the chairs of the EPS PPD and PPCF boards should meet at about the same time to discuss *inter alia* the selection of guest editors for the special issue. Concern was expressed about a downward trend in the number of papers published in the special issue.

2. EPS 2024 conference - Salamanca

2.1 Current status from the LOC (LV)

LV reported that Palacio de Congresos in Salamanca had been booked from July 7-13. It can host more than 1000 participants and should certainly therefore be big enough. Small and medium-sized rooms will be available in addition to the main auditorium. Rooms have been allocated for parallel MCF, BPIF, BSAP and LTDP sessions. Also 4 rooms have been booked for the PC meeting prior to the conference (March 4-5 2024). There will be a welcome reception on the evening of Monday July 8 at Palacio Fonseca in Salamanca. Three options are being considered for the gala dinner: Palacio de Carrascalino, El Villar de los Álamos (both outside Salamanca) and Hotel Alameda Palace

(in Salamanca). Several excursions are planned for the afternoon of Wednesday July 10. CR will organize the Women in Plasma Physics meeting: 60-80 participants are expected at this event. Registration will be mandatory, but there will be no charge. The conference website will include a page for prizes.

Registration fees were proposed as follows (on the assumption of more than 600 participants):

	EPS member	Non-EPS member
Early registration	€600	€650
Late registration	€700	€750

AD proposed offering a discount for students. This will be the 50th EPS plasma conference: it was suggested that this landmark should be marked in some way. Another comment was that having the gala dinner outside Salamanca would make it more expensive due to the need to hire transport. Since Salamanca is not particularly easy to get to, it was proposed that buses could be chartered for participants arriving at the airport in Madrid.

2.2 Report from the PC (JK)

JK provided a provisional list of plenary speakers selected by the PC, commenting that the selection process had to be compressed to two weeks due to delays in the launch of the conference website. There had been 209 nominations (slightly fewer than for the Bordeaux conference), of which around 55 were for plenaries. 21 PC members were physically present at the PC meeting on December 4 2023, with 10 members participating online. JK commended Svetlana Ratynskaia (KTH) as a particularly effective chair of the MCF subcommittee. It wasn't yet possible to give a final list of invited speakers. Justin Ball (SPC) and Clarisse Bourdelle (CEA) were named as MCF plenary reserves. Omar Hurricane (LLNL) has been selected for a plenary on the achievement of fusion gain greater than unity in NIF. This selection was questioned by SW on the basis that NIF had a similar plenary in 2023 and proposed instead that the BPIF plenary slot be awarded to the University of Rochester on direct inertial fusion drive. CR suggested that Omar Hurricane could be offered an invited talk instead. SW also questioned the selection of the reserve BPIF plenary speaker, Wolfgang Theobald (Focused Energy). It was agreed that at least the title of this presentation needed to be changed. It was proposed that one plenary should be solicited from the LOC. MM suggested that this plenary slot should be offered to the whole of Spain. LV pointed out that as a Board member he was disqualified from being a plenary speaker himself. MS asked whether all proposals selected as plenaries had also been nominated as plenaries; JK confirmed that this was the case, and that this was not unreasonable. BD commented that it would be highly desirable to have an MCF talk on the new JT-60SA tokamak, in view of contradictory information coming out on its status. CS commented that such an update might be more appropriate for the Symposium on Fusion Technology (SOFT) conference. KC argued that there was a strong case for such a talk given that JT-60SA is

half-European despite being located in Japan. JS commented that a JT-60SA talk should cover both technical problems and physics.

2.3 Special Sessions (JK)

JK reported that an insufficient number of nominations had been received to justify a special session on privately-funded fusion. It was suggested that this may be indicative of insufficient physics content in what has been achieved so far in the fusion private sector.

3. EPS 2025 conference - Vilnius (RG and JT)

RG gave a presentation on planning for this conference. The dates are confirmed as July 7-11 2025. A project manager will be appointed in 2024. The conference site (Radisson Blu Hotel Lietuva) is in central Vilnius. Two possible venues are under consideration for the welcome reception (the Palace of the Grand Dukes of Lithuania and Vilnius Town Hall). A preliminary budget was presented, based on the assumption of 600 paying delegates and early registration fees of €550 (EPS members), €610 (non-EPS members) and €200 (students). November 22 2024 is proposed as the deadline for invited and plenary talk nominations. In the discussion following this presentation, it was suggested that the EPS2025 website should be set up prior to the Salamanca conference so that it could be announced there. It emerged that the estimated number of delegates (600) is also the capacity of the main auditorium at the conference venue. However repeat screens could be used in other booked rooms if the number of participants at any session exceeds this number. A range of accommodation options will be available.

4. EPS 2026 conference – Edinburgh (KMC)

KMC gave a brief update on plans for this conference. He reported that the Edinburgh International Conference Centre had been booked for June 29 – July 3 2026 at a cost of £126,300 plus VAT, and that the National Museum of Scotland had been booked for the gala dinner at a cost of £5,500 plus VAT. He mentioned also that a series of regular meetings had been set up involving the LOC chair (Fulvio Militello, UKAEA), KMC and another UKAEA staff member with experience of organizing conferences (Kate Conway).

5. EPS 2027 conference – Lausanne (BD)

BD gave a very brief update. The week of July 4-9 2027 has been pencilled in for this conference. The costs of hosting it in Lausanne are on the high side, but not prohibitively so. BR also mentioned that the mayor of Stuttgart had approached him to express interest in hosting the EPS plasma conference. It is likely that Alf Köhn (University of Stuttgart) would be the LOC chair. This could be the venue in 2028.

6. Communications from representatives of AAPPs and APS (AS and ET)

AS reported that the 2023 AAPPs-DPP conference (Nagoya, Japan, November 13-17 2023) had attracted around 1,100 participants and had included a special session on private sector fusion.

He emphasised that contributions (including talks) from plasma scientists based in Europe and the USA were strongly encouraged at this conference.

ET gave a brief report on the 2023 APS DPP conference in Denver, CO. Around 2,200 abstracts were submitted: there were 111 invited talks, around 1200 posters and around 800 contributed talks. There was a special session on the latest ICF results from NIF. Artificial intelligence has been added as a sub-category to each of the sub-sections of the DPP, and there were many contributions on this topic. The subject of public-private partnerships in fusion was also covered at the conference. Remote participation at the APS DPP was made possible, but a large majority of delegates (~93%) attended in-person. BD commented that it would be riskier for the EPS PPD to offer remote participation due to greater competition in Europe from exclusively in-person conferences. ET replied that since 2021 the APS had made it mandatory for its conferences to offer virtual participation, but the use of this option was declining. LV spoke in favour of the hybrid conference format. ET made the point that it enabled delegates who had registered to attend in-person and could no longer do so to still contribute to the conference.

At this stage the Board went into "closed session"

1. Minutes of previous meeting (KMC)

The minutes of the previous full meeting of the Board on July 2 2023 were approved.

2. Innovation Prize (EK)

EK reported that there had been no nominations so far, but there is still plenty of time since the deadline is February 15.

3. PhD Prize (MS)

MS reminded the Board that the maximum number of referees for this prize was now up to five, to be selected according to the thesis topics of the nominees (MCF, BPIF, BSAP and LTDP). However there had been no nominations this year in the LTDP category. Only 2 out of 21 nominees are women. Given the nomination list for the 2024 awards, the panel composition proposed is two members for MCF and one each for BPIF and BSAP. MS asked the Board to choose from a long list of possible panel members. A short list of possible jury members was then selected, to be contacted by MS to check their availability.

4. Alfvén Prize

AD reported that there had been 4 nominations compared to 10 last year: it was suggested that more publicity for the prize may be needed in the future. Following a *tour de table*, in which Board members expressed their views on the merits of the nominations, it was decided that the 2024 prize would be awarded jointly to **Tünde Fülöp** (Chalmers University) and **Per Helander** (IPP Greifswald) for outstanding contributions to theoretical plasma physics, yielding

groundbreaking results that significantly impact the understanding and optimization of magnetically confined fusion plasmas.

5. Website for 4-page papers (BD)

BD reported that he had PDF files for the 4-page papers that had been submitted, but no access to metadata linked to these papers. Unless the metadata can be provided, they will need to be reconstructed manually. AD commented that this is more difficult when the papers have been written using LaTeX. Only 229 papers have been submitted this year. BD reported that only PPCF and Nuclear Fusion had provided assurances that the 4-page papers would not be included in anti-plagiarism checks; other journals needed to be pushed to do so. It was suggested that these assurances should be read out at the annual conference and posted on the website. AD proposed that in the long term a contract was needed for the 4-page papers with a landing page provider that was not tied to BD's institute, EPFL. MM concurred, and suggested that a landing page should be rented for 5-10 years. It was agreed that Indico would be a suitable platform for the abstracts and 4-page papers at EPS2024. Some concern was expressed about the abstracts and papers at EPS2025 since a private company is providing the local organisation. It was agreed that the Board needed to monitor closely this aspect of the local organisation in 2025.

6. Early Career Prize (MM)

CR proposed that Anne L'Huillier (Lund University, co-winner of the 2023 Nobel Prize in Physics) be asked for consent to name the new Early Career Prize after her. The board agreed that this was worth a try. **Action:** CR to contact Anne L'Huillier. It was also agreed that Sylvie Jacquemot should be asked instead if Anne L'Huillier declines. **Action:** KMC to simplify text drafted by MM on the nomination criteria for this prize. It was agreed that nominations would be submitted via a dedicated email address to which MM will have access.

7. Status of PC for EPS 2025 conference (report from MCF, BPIF, BSAP and LTDP subgroups)

KMC reported that Fernanda Rimini would be willing to chair the EPS2025 PC. CR reminded the Board that Marija Vranic (IST Lisbon) had previously been suggested for this role and had provisionally accepted. It was decided that Marija Vranic would be confirmed as the 2025 chair, and that Fernanda Rimini would be asked if she would be willing and available to be EPS2026 PC chair. It was agreed also that Ineke De Moortel (University of St Andrews) would be a suitable back-up as BSAP chair if Philippa Browning (University of Manchester) declines. Andrew Gibson (Bochum University) was proposed as a member of the LTDP subcommittee. Yurii Koftun (Kharkiv Institute of Physics and Technology) was added to the proposed MCF subcommittee. LV presented a list of possible members of the BPIF subcommittee. **Action:** KMC to send template PC invitation email to LV.

8. Open discussion

8.1 Format and location of future PC and Board meetings

Although holding the December 2023 PC and Board meetings in Heidelberg was judged to have been a success, BR indicated that he would prefer not to organise future such meetings. MS offered to host the 2024 December meeting in Padua. It was agreed that this would be a suitable choice – Padua is close to Venice airport, which serves many European cities. It was proposed to hold the PC and Board meetings in the week commencing December 2 2024, with the Board meeting most likely to take place on Tuesday December 3. The aim is to conclude Board business that day, with members being encouraged to book accommodation for the nights of both December 2 and 3 so that they can stay until the conclusion of the meeting, whenever that occurs.

8.2 Board elections: start of next cycle

It was noted that nine members of the present Board were due to stand down in 2025 (ACI, AD, BD, EK, TM, CS, JS, VT and SW), and that it would be necessary to have an election for new members in 2024 if the number of nominations exceeds the number of vacancies. If on the other hand there are insufficient nominations to fill the vacancies, the Board can appoint members, breaking the 8 year cycle if necessary. Board members were asked to consider who might be suitable as new members. It was noted also that new coordinators for the Alfvén, Innovation and Landau-Spitzer prizes would be needed, and that it would be preferable for continuing Board members to take on these roles to avoid over-burdening new members with additional responsibilities. New members will start their terms during the EPS2025 conference in Vilnius. KC's first term as Board chair will end in 2026; she will have the option of serving a second term.

8.3 Report from inclusivity group (MM) & visibility of DPP (all)

MM advocated the collection of statistics on characteristics including gender in conference registrations, ensuring that such information is anonymised. BD emphasised the importance of collecting essential metadata (names, institutes, email addresses), and CR commented that gender information on PC members and invited/plenary speakers should be recorded since a person's gender isn't necessarily obvious from their name alone. MS observed that in the past this type of information has been posted on the Board website: VT commented that the Board web pages generally need to be updated. BD suggested that a designated Board member should be responsible for maintaining the website, and that perhaps one of the new members to be elected in 2024 could take on this role. MM proposed that this job could be outsourced to a professional service. BD commented that this may be acceptable provided that the external service provides a product that is portable.

9. Any Other Business

Action: the Board to resume its former practice of writing and posting on its website an annual report (previous reports are listed [here](#)). An annual report is needed in particular for 2023 since it will be the only official document reporting the composition of the EPS2023 PC.