

# COST Action CA16218 Action Title: NANOSCALE COHERENT HYBRID DEVICES FOR SUPERCONDUCTING QUANTUM TECHNOLOGIES

## Minutes Management Committee Meeting GP3 16<sup>th</sup> of April, 2020 (Remote meeting - via Zoom)

#### 1. Welcome to participants

The meeting starts at 11h00. The Chair of the Action, Hermann Suderow opens the meeting and welcomes all participants. This is an exceptional online MC meeting forced by the confinement circumstances affecting all European countries due to the coronavirus outbreak.

The Chair of the Action acknowledges the initiative taken by COST Association to be able to cover expenses of zoom during this grant period through the OERSA.

### 2. Verification of the presence of two-thirds of the Participating COST Countries or, if applicable, a quorum

39 participants are present in the meeting. More than 2/3 of the country representatives of the Action attended this 3<sup>rd</sup> Management Committee meeting. Therefore, the quorum was achieved. The decisions taken during the meeting and the issues discussed are reported in these minutes and will be sent to all MC members for approval.

#### 3. Adoption of agenda

The meeting participants agreed to adopt the draft meeting agenda sent by the Action Chair via email on the 14<sup>th</sup> of April, 2020, where the main points for discussion were also highlighted.

#### 4. Approval of minutes and matters arising of last meeting

There were no pending issues from last meeting. All participants acknowledged and accepted the minutes of previous MC meeting held in February 2019 in Eilat (Israel) through e-vote shortly after previous meeting.

#### 5. Update from the Action Chair

a) Status of Action: start and end dates of Action, participating COST countries, participating NNC/ IPC institutions and Specific Organisations.

CSO approval:	23/06/2017	GP 1: 1 Nov 2017 – 30 April 2018
Start of Action:	18/10/2017	GP 2: 1 May 2018 – 30 April 2019
End of Action:	18/10/2021	GP 3: 1 May 2019 – 30 April 2020
Duration: 4 years		GP 4: 1 May 2020 - 30 April 2021
Parties:	28	GP 5: 1 May 2021 - 30 Sept 2021

Republic of Moldova joined the Action since the previous meeting.

The question about the possibility of extending the action for one full year considering the current coronavirus exceptional circumstances is raised, as at present is not completely clear how the situation will evolve or when regular meetings will start again. The chair of the action indicates that this point will be discussed later on in the meeting (Point 10 – Scientific Planning of the Action).



The number of NNC included in the Action is one (Ukraine) and the number of International Partner Countries is 5 (Colombia, Brasil, Japan, China and United States).

Any other institutions interested in joining and which can be of benefit for the action are welcome. The Chair briefly explains the rules for participation according to the COST Vademecum.

### b) Short Term Scientific Missions (STSM) and ITC conference Grants: review of completed reports and new applications

The STSM committee granted 6 STSMs during this period. A brief discussion about promoting the participation of female researchers in STSM is raised, as, by far, most STSM applications were made by male researchers during this Grant Period. 3 STSMs were carried out by ITC students. The Chair acknowledges the work of the STSM committee.

The ITC conference grants committee granted 3 ITC CG during this period (another one was planned for April but was cancelled). Two of them were granted to female participants. The Chair acknowledges the work of the ITC CG committee.

#### c) Dissemination actions - Project video

A project video for promoting the action and explaining the objectives in "layman" terms has been created. It can be found in Youtube and it will also be added to the home page of the Action website as well as to the Action's twitter profile. Efforts will be taken in the next period to improve the "positioning" of the webpage (this was the only "to be improved" point mentioned in the evaluation report from the first half of the project – this evaluation will be discussed later, in point 7 of the agenda - Monitoring of the Action).

#### 6. Update from the Grant Holder: Action budget status

The planned budget for GP3 was presented to the Management Committee members by the Action Chair with a brief explanation of the expenses incurred to date.

A total budget of 130k€ was available for this GP. The largest part of the budget (55 k€) was used to cover the **International workshop on Vortex Matter 2019**, which was held between the 20<sup>th</sup> and the 25<sup>th</sup> of May 2019 in Antwerp (Belgium). 62 participants were supported.

Another meeting "Superconducting hybrids a the extreme" was planned to be held between the 10<sup>th</sup>-13<sup>th</sup> of March in Tatry (Slovakia). However, this meeting had to be cancelled in the last minute due Force Majeure. The Force Majeure event was triggered by the Coronavirus restrictions and is duly recorded in the documentation available at the COST webpage. The Chair of the action thanks the organizers for the effort made towards the organization of this meeting and for duly handling the cancellation. The main issue with this cancellation is that there is a remaining budget of around 35k€ that will not be spent before the end of the grant period. The Chair informs that COST rules do not allow at present to carry over the budget not spent within one period to another. The Chair also informs about discussions with the Project Officer at COST, Mónica Pérez Cabero, where she informally mentioned that COST will gather all information about unspent resources in July and inform Actions about the possible changes in the budget that might help mitigating these exceptional circumstances. The MC insists as a whole that we should be able to recover the budget lost and provides full support to the Chair to insist at COST about this point.

#### 7. Monitoring of the Action

The Chair informs about the mid-term evaluation of the Action, sent to the MC some time ago. The only "to be improved" point mentioned in the evaluation report was about the findability of the project webpage. Effort will be made in the forthcoming gran periods to improve this aspect.

Industry collaborations: all the members of the management committee were asked to give their contribution/suggestion about partners from the industry to be involved in the Action. Teresa Puig is managing this issue.



Up to now, the web page lists 110 publications reporting an acknowledgement to this COST Action. The Chair reminds that it is essential to acknowledge the Action in the publications in order to improve its visibility and facilitate exchanges. Furthermore, the publications receive additional visibility by being highlighted in the webpage and social network activity of the Action (twitter).

#### 8. Implementation of COST policies on:

- a) Promotion of gender balance and Early Career Investigators (ECI)
- b) Inclusiveness and Excellence (see below list of Inclusiveness Target Countries)

The Chair of the action presented the monitoring efforts made by the Action. 30% of the STSMs budget has been spent on or from ITC countries. 66% has been invested in covering the STSMs costs of ECIs.

From the budget dedicated to Vortex workshop in Antwerp, 30% was dedicated to support participants from ITCs and 66% to ECIs (a higher percentage of which were allocated with talks).

The Chair remarks the need to monitor carefully the gender balance and early career investigators support of the Action. A poll has been created by Dr. Beena Kalisky, the leader of the gender balance monitoring committee. The chair requests all MC members to fil this poll to be able to properly compile the information and make the results public. The Chair informed about general statistics related to gender and insisted that monitoring and improving as far as possible gender balance are key points of the Action.

#### 9. Follow-up of MoU objectives: progress report of working groups

The Chair reminded the Action objectives and WGs based on the Memorandum of Understanding as well as the management structure.

#### 10. Scientific and budget planning

a) Scientific planning

As the meeting "Superconducting hybrids a the extreme" planned for the 10<sup>th</sup>- 13<sup>th</sup> of March in Tatry (Slovakia) had to be cancelled in the last minute due to the Coronavirus restrictions, and considering the efforts made by the organizers, the Chair of the action proposes to rearrange this meeting in the forthcoming grant period. Initial dates discussed with the local organizers is November 2020. However, seeing how the coronavirus situation is evolving and considering possible rebounds in Fall, it seems too risky to involve the organizers in organization procedures again.

Therefore, it may be less risky if the meeting is planned for March 2021, exactly one year later than initially planned. Considering the situation, it is suggested to organize just one big meeting for GP4 instead of two as it has usually been done until now. Around 100 people could be covered for one full week.

The MC decides to go on with this proposal, and revise the situation again in a remote meeting in September 2020 (as also mentioned below). Then, the MC will also consider the possibility to organize the meeting a school format. The important aspect that it is generally difficult to obtain funds for organizing schools is raised. As the Chair mentions, our planning includes one further event in a school format before the end of the Action, and that the Action is supporting organizers using other schemes through the ITC conference grants and will continue to do so to the largest possible extent. Furthermore, the need for involvement of researchers from large scale facility in our meetings was also raised.

The Chair also thanks a lot all the effort put by other members of the MC to propose meetings in future. These are

• A "Carbon based nanostructures for superconducting devices" meeting is proposed to be arranged in Hungary in the summer 2021. Initial organization actions have already been undertaken.



- Workshop on Strong correlations and devices at large scale facilities
- The team of Austria, possibly in collaboration with Germany have offered themselves to organize a workshop/School (format to be defined based on Action needs) on Vortex matter in nanoengineered superconductors.
- Contacts with other COST Actions (COST Connect) will also be sought if time and budget allow it.

At this point all MC members agree that, especially considering this unexpected break in all types of activities and considering that the Action is being very active and successful in the implementation of its objectives, the ideal would be to get an extension of the project for one full year (i.e. until October, 2022). This proposal will be scaled to the COST Association. As this is a situation that is not only affecting NANOCOHYBRI, but all COST actions, and as the motivation of COST is based on the in-person contact between researchers, the MC really hopes that COST provides some solution. The grant holder manager informs that COST depends on the funds from the EC and in all Horizon 2020 Actions a general rule has been generated by the EC where, "due to the Covid-19 situation, all beneficiaries may request an amendment for an extension of up to 6 months of initial project duration. Such requests will be handled favourably and in a speedy manner. Any request beyond the 6-month period mentioned before will be granted based on case-by-case assessment by the funding body". Even if the total grant amount for the Action is not increased, a reasonable option would be that COST allowed the carry-over of the unspent budget to forthcoming grant periods.

The Management Committee agrees to discuss the future scientific planning again in September, once all this issues are more clear. For now, the WBP for GP4 will be organized one the basis of just one big meeting in March 2021.

In addition, in order to face proactively the current situation and maintain the cohesion and activity of the Action, it is proposed to organize regularly (for example every three weeks) web tutorials and virtual meetings. It is suggested to fix a date and time (for example every three Thursdays at 15:00) and to make them not longer than two hours to facilitate adaptation with other duties of the participants. It is also suggested to keep the format and subjects opened to be able to accommodate them to attendant's demands. Also people voluntarily willing to present can suggest subjects (e.g. focused on items of papers recently published, etc.). In some cases, participants from outside the action can also be invited to give talks. A special committee will be created to take care of this new activity. Prof. Floriana Lombardi and Prof. Milorad Milosevic offer themselves to lead this committee. Some additional members will join in the next days.

#### b) Budget planning

For the 4<sup>th</sup> Grant Period, a total budget of 110k€ is available. Of this budget, 8k€ will be reserved for STSMs (to cover an average of 8 STSMs of 1.000€), 2.250€ to cover 3 ITC CG f 750€ on average 1.200€ for dissemination and promotion of the action and 85k€ for meetings and conferences. With these 85 k€, the participation of around 100 persons for the meeting in Slovakia could be covered including meals and accommodation for one whole week (i.e. around 680€) and travel (around 120€), besides 5k€ for the local organizers support.

#### c) Long-term planning

The MC chair reminded that the Action grants extra budget (10k€) for the publishing of special editions or books. A general consensus on the idea of using this budget to write and publish a book towards the end of the action was reached. Prof. Dimitri Roditchev proposed to make it an online book linked to the project webpage in order to make it more accessible and increase diffusion, especially among the youngsters.

A debate about themes and future directions of the community building the Action arose, with the conclusion that our immediate activities should be thought of designing future participation in collaborative calls by the members of the Action.



#### 11. Requests to join the Action from:

- a) COST countries
- b) Institutions in Near Neighbouring Countries, International Partner Countries, and/or Specific Organisations: EU agencies, European RTD Organisation, International Organisations

Refer to point 5 of this document. The Chair says that there are not new requests now. The current number of member countries is within the average for other COST Actions.

#### 12. AOB

Main themes for discussion were risen in previous points.

#### 13. Location and date of next meeting

The next online MC meeting will be held in September once the issues about the extension of the duration of the action as well as on the possibility to carry-over the unspent budget of the period are clearer.

The next physical MC meeting will be held during the meeting of the next grant period, expected to be held in Slovakia in March 2021.

#### 14. Closing

The MC Chair thanked the participation of all the MC members and in particular the organizers of the meeting in Eilat. He then closed the MC meeting around 12h30.

[Meeting ends]

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### **List of Attendants**

Country	Firstname	Lastname	Position	Institution
IL	Yonathan	Anahory	MC Member	The Hebrew University of Jerusalem
FR	Alexandre	BOUZDINE	MC Member	University Bordeaux
UK	Simon	Bending	MC Member	University of Bath
SE	Annica	Black-Schaffer	MC Member	Uppsala University
СН	Johann	Blatter	MC Member	ETH Zurich
RO	Ioan Adrian	Crisan	MC Member	National Institute For Materials Physics
HU	Szabolcs	Csonka	MC Member	Budapest University of Technology and Economics
CZ	Jeroen	Custers	MC Member	Charles University
BG	Dimitre	Dimitrov	MC Member	Institute of Solid State Physics
AT	Oleksandr	Dobrovolskiy	MC Substitute	University of Vienna
ES	Isabel	Guillamón	MC Member	Universidad Autónoma de Madrid
FI	Pertti	Hakonen	MC Member	School of Science
SI	Abdou	Hassanien	MC Member	Jozef Stefan Institute
PT	Gleb	Kakazei	MC Member	University of Porto
IL	Beena	Kalisky	MC Member	Bar Ilan University
DE	Dieter	Kölle	MC Member	Eberhard-Karls-Universität Tübingen
AT	Wolfgang	Lang	MC Member	University of Vienna, Faculty of Physics
RS	Nenad	Lazarevic	MC Member	Institute of Physics Belgrade
FR	Brigitte	Leridon	MC Member	CNRS
NL	Chuan	Li	MC Member	University of Twente
SE	Floriana	lombardi	MC Member	Chalmers University of Technology
СН	Ivan	Maggio-Aprile	MC Member	Université de Genève
BE	Milorad	Milosevic	MC Member	Faculty of Sciences
ME	Jovan	Mirkovic	MC Member	Montenegrin Science Promotion Foundation PRONA
BG	Todor	Mishonov	MC Member	
EL	Evagelia	Moshopoulou	MC Member	National Center for Scientific Research "Demokritos"
CZ	Tomas	Novotny	MC Substitute	Faculty of Mathematics and Physics
ES	Anna	Palau	MC Substitute	Institut de Ciència de Materials de Barcelona (ICMAB-CSIC)



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ES	Teresa	Puig	MC Member	ICMAB-CSIC
FR	Dimitri	Roditchev	MC Substitute	ESPCI-ParisTech
SK	Peter	Samuely	MC Member	Institute of Experimental Physics, Slovak Academy of Sciences
BE	Alejandro	Silhanek	MC Member	Université de Liège
EL	Georgios	Sirakoulis	MC Member	Democritus University of Thrace
DK	Mads Peter	Soerensen	MC Member	Technical University of Denmark
EE	Raivo	Stern	MC Member	National Institute of Chemical Physics & Biophysics
ES	Hermann	Suderow	MC Chair	Universidad Autonoma de Madrid
IT	Francesco	Tafuri	MC Vice-Chair	Università di Napoli Federico II
BE	Joris	Van de Vondel	MC Substitute	KU Leuven
IT	Daniela	Stornaiuolo	MC Member	Università degli Studi di Napoli Federico II

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