



# **High Field Magnet Network**

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6th TIARA collaboration council

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#### **HFM Network**

- 1. Why do we need a HFM Network?
- 2. What are the objectives?
- 3. What are the foreseen activities?
- 4. What is new?
- 5. What level of financing is needed?
- 6. What type of organisation is needed?
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### Why do we need a HFM Network?

#### We can observe:

- Projects and their networks, often EU, take 3-4 years and then stop
  - HILUMI, EuCard2-WP10, Eucard-WP7, FuSuMaTech, CARE-NED, EuroCircol-FCC, ARIES, Eurotapes
- Each project only has a subset of all potential partners
- Only a very limited number of 'tenors' take the initiative for new projects
- Initiatives are mostly top-down
- Most standard meeting events (conferences) are not targeted but very general, exception are the workshops and meeting inside the projects, but there only a subset of the potential partners participate
- Many universities or institutes are not able to participate due to the particular (EU) project financial requirements
  - Directly failed negotiations:
  - For Eucard-WP7: U Twente, STFC-RAL, CIEMAT, TUW Vienna
  - For EuCard2-WP10: Grenoble-INP, STFC-RAL



### What are the objectives?

- Make and maintain a comprehensive map of the HFM landscape, independently of participation to specific projects (EU or non-EU)
- Have a open forum that meets regularly to be able to discuss common scientific and technical issues in a targeted way; Offer intellectual support to the projects
- Find and co-opt new partners, with relevant interest and contribution in HFMs, whether active in accelerator or other fields
- Provide access to the above forum to students and staff of all educational institutions independent of participation to a specific project (EU or non-EU)



### What are the foreseen activities?

- Organise regular <u>topical</u> workshops (e.g. take over the WAM series that will be orphaned end of April)
- Targeted meetings for establishing and maintaining the landscape map
- Discuss advances, identify technical challenges, launch proposals for new HFM actions and projects



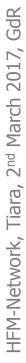
### What is new?

- The network is not limited in time nor linked to a single project
- The ideas and information flow is both bottom-up and top-down
- All possible actors are involved
- All universities get the opportunity to place students in frontier projects
- Frontier projects have access to a larger pool of (young) scientists
- Frontier projects have access to a larger academic pool
- A more open way to broadcast and join in new projects proposals



### What level of financing is needed?

- 2 topical workshops per year: up to 40kCHF
- Website support: ~0.5 PM/y (best is CERN based)
- Secretariat support 0.5 PM per workshop (major labs, could circulate)
- This could be financed by:
  - Subventions by major EU projects in the field
  - Subventions by the major labs
  - Small contribution fees





### What type of organisation is needed?

- We need a umbrella: a wide scale entity to endorse the idea (TIARA)
  - Some sort of MoC
- Also possible with MoCs via CERN



**NHMFL** 



## Who would potentially be concerned?

CEA <sup>1,2,3,4,5,6,7</sup>
CERN <sup>1,2,3,4,5,6,7</sup>
CNRS <sup>3,5,4,8</sup>
Grenoble-INP <sup>2</sup>
U Grenoble-Alpes
Nijmegen HFL
STFC-RAL <sup>3,4,5</sup>
CIEMAT <sup>1,6</sup>
KIT <sup>2,3, 4,8</sup>
INFN <sup>1,2,3,5,6</sup>
PSI <sup>4,6</sup>
EPFL <sup>6</sup>
LBNL <sup>1,6</sup>
FNAL <sup>1,6</sup>
BNL <sup>1</sup>
KEK <sup>1,6</sup>
ENEA
ITER-org
F4E

DTI Denmark <sup>2</sup>
UniGe <sup>2,3,6</sup>
U twente <sup>2,5,6</sup>
U Tampere <sup>1,2,3,6</sup>
TUW Vienna <sup>8</sup>
MIT
NIMS
Ohio-LASM
PRW-Woclaw <sup>3,5</sup>
Southampton U <sup>2,3</sup>
VNIINM-Bochvar
LAL-Annecy
BINP
Bar-Ilan U
UAB-ICMAB <sup>8</sup>
U Patras <sup>6</sup>
U Bologna
BHTS <sup>2,3</sup>
Bruker-Hanau
ASG <sup>4</sup>

GE-Alstom
Babcock-Noel<sup>4</sup>
TESLA<sup>4</sup>
Oxford<sup>4</sup>
Columbus<sup>3</sup>
OST
ELYTT<sup>4</sup>
SIGMAPHI<sup>4</sup>

- I. HILUMI
- 2. EuCard2-WP10
- 3. Eucard-WP7
- 4. FuSuMaTech
- 5. CARE-NED
- 6. EuroCircol-FCC
- 7. ARIES
- 8. Eurotapes



## What would we like to ask from TIARA?

- Do you think this HFM network is a viable idea?
- Can you assist us in developing this network?
- When matured could you endorse and host this network?

