



**iSAS weekly meeting**

17th February 2025

Present: Achille Stocchi, Adèle de Valera

Absent: Jorgen D'Hondt

Notes:

**Website integration**

\* Adèle sends a reminder to Web developer

**Milestone WP3 "Modification of choke cavity for flux trapping study"**

\* "What exactly should be done **design** or **operation** of an updated facility?" - to decide because if operation means 2 months delay (cf. Oleg Malyshev message)

Context for the question:

Means of verification is "engineering report" (GA p91)

Objectives of Task 3.2 (GA p69)

"Task 3.2: Flux trapping – M1-M32

• Explore new coating parameters for planar samples and small resonators to minimize flux trapping in SC A15 films.

• Upgrade the STFC choke cavity and the HZB QPR to support detailed flux trapping analyses of coated superconducting films.

• Characterize trapped flux, flux viscosity and the interaction with the RF field with SC A15 films in small resonators and samples with the upgraded systems."

Description of the Task 3.2 Flux trapping (GA p70)

"Task 3.2 (INFN, CEA, HZB, UKRI) – This task aims to study how trapped magnetic flux may affect the superconducting properties of the thin film and its RF surface resistance. Initially, copper samples coated with A15 superconductors by PVD techniques will be provided by the INFN and UKRI. Three facilities will beused to characterize the samples: the choke cavity test facility at UKRI and the HZB QPR@SupraLab as well as the magnetometric mapping system at HZB. The facility at UKRI will be upgraded with a magnetic shield and Hall probes, allowing it to study magnetic flux trapping in 100-mm planar samples. At HZB the impact of flux trapping will first be investigated in the QPR equipped with an excitation coil and a fluxgate probe which allows one to correlate flux trapping with the RF performance of the SC film, as well as the study of flux viscosity. In a later step, the existing magnetometric mapping system for 1.3 GHz cavities at HZB will be used to investigate cavities from Task 3.5. The results will feed back on the cavity coating procedures."

\* Adèle sends context in reply to message from Jorgen saying the topic will be debated in Coordination panel meeting and add a slide

**CA v2 & shared NDA**

NDA draft completed by Achille with the complements of WP7 Leader

\* Adèle sends it to Julie as is

**AMD**

\* Has CERN fully confirmed yet? Not yet

**Advisory Board**

Deepa Angal-Kalinin declined the role of Advisory Board member - asked to peer reco

\* Ideas to replace her? [Britta Redlich](https://www.desy.de/about_desy/directorate/britta_redlich/index_eng.html)? Jens doesn't know her; Wim Leemans? Jorgen asks informally if available for that kind of role before proceeding

**Padova meeting**

**Industry workshop**

Agenda coming soon

\* Souleymane Kamara, Head of technology transfer at IJCLab, will talk about IJCLab's experience on know-how transfer of cryomodule assembly with CNIM

\* INFN too, probably Diego Tonini from Technology transfer office (who's just registered)

\* & 3 companies will give a talk as well (Zanon, Euclid & ACS)

\* New companies invited to Padova: from register details there is at least DB Elettronica Telecomunicazioni SpA- Science Division - 2 representatives will be in Padova (in person) & Eurolls w/ 2

\* Point of attention: no registration (yet?) from RI, Plasmatherm or Cryoelectra -> Adèle asks Cc WP7 Leader to academic contacts who introduced them to iSAS to discuss with them (RI is Jens Knobloch, Cryoelectra is Holger Schlarb & Plasmatherm is Giorgio Keppel)

**Governing board**

\* From 12:15-13:15 on March 14? Or during the slot of the LNL visit (and organise a visit group for the meeting participants who will do a reduced tour)? To check with Julie and then again with Padova organisation team

\* Adèle asks for an added slide (for WP which don't already have it) for a financial report (including jobs filled) and risk mitigation report too for Padova (and all Steering committees afterwards)

\* This means during Padova compiling and analysing to do on the spot for Governing Board meeting

**February Coordination panel meeting**

Feb 21

\* Adèle's draft to review before the meeting on Friday

\* Can we consider milestone #15 "Design of FPC coupler" in progress again? Is the turnover completed yet? Yes, the roadblock has been passed and the milestone is in progress again -> Adèle updates Work plan