

Magnets Working Group Meeting Notes

Magnet Working Group

Date: Feb. 6th 2025

Indico: <https://indico.cern.ch/event/1502999/>

General Messages:

- Annual Meeting May 12-16, in DESY (see attachments in Indico)
 - -> comments: discuss at annual meeting beam quality versus field quality throughout machine, to move towards a more realistic machine (also considering cost optimization as well)
 - Scott – cost performance curves... understand where is the point when the cost shoots exponentially, and stay below that
 - Quick feedback for annual meeting to Luca
- mmWG Meetings – Please provide any input for ideas (see slides)

Publication Plan

Some key notes

- IPAC, Taiwan in May
- MT-29, Boston in July
- EUCAS-2025, Porto in September (**Deadline** approaching in 1 week!)
- COMPUMAG-2025

ESPPU Preparation (see attached files)

Some key notes

- What is going to happen at the strategy: we are at step 1, bottom up phase where various groups put proposals, a proposal is up to 10 pages long. → executive summary will be 10 pages long, then large report is supporting material
- R&D is a request for resources (why, how) for the next 5 years
- 2nd document, stand-alone document, for independent submission to the ESPPU, as input toward a potentially special review in Venice.
- See excel table in Indico, has costing and personnel resources (see slides 5, 6)
- TRL driven R&D (slide 4) – Technology Readiness Level, we need to reach TRL 6 for decision, this is what the proposal is about, to push various magnets to level 6.
- Absolute deadline 31st March for documents, feedback by end of February
- Provide feedback by the next meeting
- Cost estimate of Carlo Rossi ... need values of cost before deadline, input in next couple weeks

Some questions / comments

- H. Kate: consistency is important between documents
- H. Kate: Need a very clear path how to have a muon collider by 2050 and not 2080, referring to the TRL driven R&D, what to focus on, consistency of these ratings ...