

2016-07-18 ACHIP Meeting

Participants:

Sven Reiche, Eduard Prat, Simona Bettoni, Marco Calvi, Franziska Frei, Eugenio Ferrari, Werner Zoller, Romain Ganter

Report from the collaboration teleconference:

- Unfortunately, the initial teleconference had connectivity issues. Slides are available from DESY indico page.
- Next collaboration meeting will be in person, at Erlang, the 15 and 16 of September.
- Confirmation of the Spring 2017 meeting in PSI, at the beginning of March
- First indications from the Pegasus experiment of an achieved gradient in the structures > 1 GeV/m.

Milestones for SATSY chamber:

- see dedicated document. A further discussion of each WG responsibilities for the Milestones is postponed to next meeting.

DCR and Laser location:

- The location of the experiment to the switchyard is now clear to everyone and it is going to be included in the DCR.
- The main concern is the laser location. Currently the laser is in Erlang where the colleagues are gaining experience with it, in particular with its maintenance needs.
- Three possibilities have been suggested by Romain:
 - Directly inside the tunnel
 - ❖ Pros: better temperature stability, shorter beam transport
 - ❖ Cons: access for maintenance
 - Seed laser room (2 possibilities)
 - ❖ Pros: Access
 - ❖ Cons: temperature stability, longer beam transport, need to drill holes
 - ❖ Two locations are eventually available in this room, one is ~ 40 m away from the chamber and one is on the opposite side of the room.
 - Modulator room above the tunnel
 - ❖ Pros: hole is already there for services and adequate for radiation protection safety
 - ❖ Cons: long beam transport, temperature stability
- Laser safety has to be foreseen and discussed (see [document](#))
- Werner is organizing a meeting with Thomas Lippert to discuss the different locations under the aspect of laser safety

Planning:

- SwissFEL steering committee is foreseen for the 11/08/2016. Ideally we should present some "longer time schedule plan" for the experiment.
- Access to beam time and compatibility with Aramis commissioning.
- Sven suggested that ACHIP could benefit if a synergy with a possible THz generation experiment is agreed: Simona is studying the possible configuration.

Budget:

- Marco proposed to outsource the production of the permanent quadrupole magnets.
 - A quotation will be ready in a couple of weeks. Tolerances will play a crucial role in the final price.
 - Sven suggests that, if the gradient of the magnets is well known, the position of the quadrupoles in the chamber can be adapted to compensate.
- Eugenio and Franziska will prepare the budget for the experimental chamber.
- Manpower budget needs to be estimated also for beam dynamics and diagnostics.
- Check the availability of rack space and eventually evaluate the need for a new rack

Outreach ideas:

- Werner showed us a nice article concerning ACHIP in P.M. found at the dentist.
- Does PSI organize an open day this year and how should we contribute?