Minutes of PITZ Physics Seminar, 08.09.2021

Project: PITZ

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Agenda:

- 1) AOB
- 2) Talk by A. Luenangaramwong:

Results:

- 1) AoB
 - a. FS: Can we get overview of what's in the tunnel in one of the next meetings? AO gives short overview of status of individual components
 - b. FS: Human power situation in our workshop for Gun5 exchange? Few trainees are there for help
 - c. FM: How do I get help from people? FS: Few volunteered, just email pitzzeuthen.de the day before, and the people should speak up.
 - d. FS: Do we know which screens we will use soon? AO: Yes, AN and GK said GaGG are good for us. Artem will give a talk on that in the PPS in eight days.
 - e. FS: Elena, soon TUV report has to start soon. Can you prepare the remaining ones? I have them already until August.
 - f. FS: Regarding charge feedback: Davit Kalantaryan asked for code for charge feedback, but it is a server, and Raimund says it does not make sense, as it is for Eu-XFEL in particular. GV: We have to see what we do; we are surprised about Raimunds hesitation to share code.
 - g. PITZ Outing: Please fill it out!
- 2) A. Luenangaramwong: Report on Bunch-Compressor-to-Undulator Simulation Optimized for FEL performance via Ocelot
 - a. NA: What is k1? RN, MK: Gradient of quadrupole magnet
 - b. FS: More samples needed in simulation for better understanding of lasing? AL: More samples included later.
 - c. XL: Your simulation says 1.75 nC yields best lasing. Why is this charge the best? What beam property leads to this? If you find the reason, you'll understand the simulation.
 - d. FS: Can you prove from simulation, that CSR destroys the beam, or is this speculation?
 - e. MK: Can you give us the mismatch and slice energy spread at undulator entrance for different beam charges. Also please average current for each case? AL: Okay.

Protocol prepared by Raffael Niemczyk, 08.09.2021 (Name, Date)