

Minutes of PITZ Physics Seminar, 05.03.2020

Project: PITZ

Participants: T. Weilbach, A. Lueangaramwong, M. Krasilnikov, H. Qian, M. Gross, G. Shu, Ch. Koschitzki, H. Shaker, P. Boonpornprasert, N. Chaisub, R. Niemczyk, J. Good, O. Lishilin, N. Aftab, G. Georgiev

Agenda:

- 1) Talk by Natthawut Chaisub and Georgi Georgiev – rehearsal of DPG talks (DPG cancelled)

Results:

- 1) We can get Lyot filter of different thicknesses in order to generate laser pulses with different modulation wavelength, also for THz radiation seeding
- 2) Spectral response of THz spectrometer has to be considered in the data analysis
- 3) Dielectric waveguide could be used, as it creates very high peak currents, but the transport will hard. Still to be tested.
- 4) Talk: Too long – only explain what you need, remove the unnecessary stuff. Matthias: ‘Don’t assume anything’. Slang to be avoided. Periods instead commas when displaying numbers. Do it as general as possible without losing content
- 5) Mikhail: Just pick two-three points, which you want to present. Explain these well.
- 6) In some cases the bunch length is reduced. Why? Machine is same, just the laser pulse and main solenoid are different
- 7) Talk of Natthawut 13min -> 1 min too long
- 8) Total THz power in MW range? Can’t be right...
- 9) Georgi: The equation for ‘total power’ calculation looks like peak power calculation
- 10) Which bunch length has been used? ~1.3 ps
- 11) Simulation numbers are very small. We don’t achieve such small numbers
- 12) Explanation of data was poor during talk/on slides. Has to be improved in future (make a sketch)
- 13) Data shows radiation power and spectra **after** exiting the undulator. How does the power behave?
- 14) Mikhail: ‘Be confident with the code you use.’ You have to be able to understand how the code works, what limitations are, etc.
- 15) Don’t put too many graphs into one plat. Also, don’t use yellow and green colors, as these are barely visible on projectors

Next steps:

What is to be done?	By whom?	Until when?	Done on

Protocol prepared by

Raffael Niemczyk