

Minutes of RESULTS, PITZ Physics Seminar, 2018-07-05

Project: PITZ

Participants: M. Gross, M. Krasilnikov, I. Isaev, P. Boonpornprasert, G. Shu, R. Niemczyk, N. Chattrapiban, S. Sukara, W. Foosang, H. Qian, A. Oppelt, J. Hinkel, O. Lishilin, Y. Chen, H. Huck, G. Loisch, J. Good,

1) Agenda

1. Supasin Sukara: Momentum Measurement at LEDA
2. Igor Isaev: Summer students
3. Wantanyu Foosang: Beam collimation optimization for PITZ UED
4. AOB

2) Results:

1. Supasin Sukara:
Report includes simulations of LEDA measurements without and with space charge (cylindrical and 3D) → mean momentum value is reproduced quite nicely for both simulations but momentum spread is not. Also momentum distributions do not fit. at different gun phases.
Comments:
Core+halo model was not used → that should be included as next step
Possibly also vary the simulated laser pulse length and vary the bunch charge to get a better comparison between measurement and simulation
Prepare a note about your work.
2. Alexey will work on solenoid field asymmetry simulations and Ralitzia will work on camera Health checking
3. Wantanyu Foosang:
Different apertures were tested -> a location in front of the CDS booster was chosen. Aperture sizes between 50 and 250 um were studied for different charges. A set of 4 quads was tuned to obtain a small beam size at the sample. The aperture location is at low screen 3 and the quadrupoles are also at existing quad positions. To be realized simply the aperture has to be designed.
4. AOB:
Please notice the seminar of the M division on reliability and availability tomorrow morning at 10:00AM, video connection to the control room.

Protocol prepared by
Frank Stephan