

# Minutes of RESULTS, PITZ Physics Seminar, 15.10.2015

Project: PITZ

Participants:

G. Vashchenko, F. Stephan, Y. Renier, J. Good, M. Krasilnikov, M. Gross, I. Isaev, H. Huck, G. Loisch

## Agenda:

- 1) O. Hensler: Fast GUN startup
- 2) General issues
- 3) Runtime coordination

## Results:

- 1.1. O. Hensler: Pulse length not ramped up slowly anymore, but gun ramped up at nominal pulse length. Temperature setpoint varied accordingly, no undershooting water regulation.
- 1.2. M. Grecki: Final state machine still under development, instability possible due to temperature fluctuation and resulting refl. power fluctuation
- 1.3. Output correction is not used at FLASH; will be clarified why and if PITZ shouldn't do that as well
- 1.4. Fast gun recovery is not thought as a conditioning tool, but could be used accordingly to coupler conditioning procedure at XFEL
- 1.5. O. Hensler is back from holiday on 29<sup>th</sup> of October and will try to do ca. 2 hours each on Thursday and Friday afternoon
- 1.6. Frequency tuning procedure could be integrated into SMAC to increase conditioning, but only for gun IL, not for gun trip for safety
2. General issues
  - 2.1. Summary for collaboration meeting: coupler kick, 3D, TDS, Li-plasma
  - 2.2. Yoga and backbone training supported by DESY for employees
  - 2.3. Time management course in English; registration ongoing
  - 2.4. 3<sup>rd</sup> November talk about gun #5
  - 2.5. May 2016 PAC in Korea
  - 2.6. DPG Spring Meeting Darmstadt March; abstract deadline 15<sup>th</sup> December
  - 2.7. Reminder publication database: please send publications to H. Huck
  - 2.8. Zeuthen applied as HQ for Cerenkov telescope; funding applications for LHC
  - 2.9. Osterhoff group paper released on PWFA
3. Group Go-Kart outing
  - 3.1. Scheduled to 6<sup>th</sup> of November
  - 3.2. Exact kind of race and corresponding price will be defined soon

#### 4. Run coordination

- 4.1. Technical shifts are asked to use the logbook
- 4.2. H. Huck: 5nC can still be reached at 4.5BSA
- 4.3. RF-crew adjusted FB
- 4.4. Phase stability about 0.7, amplitude stability improved to former optimum
- 4.5. High1.Scr2 is working, G. Vashchenko will fix optics
- 4.6. J. Good wants to have tunnel access for Ellipsoidal Laser beam transport
- 4.7. Runtime schedule presented by M. Krasilnikov
- 4.8. H. Huck suggests to have a section in the logbook for nominal settings for usual measurements
- 4.9. RF-timing is suggested to be changed for coupler kick studies – needs to be clarified whether possible or not

#### Next steps:

| What is to be done?  | By whom ?                     | Until when? | Done on |
|--|-------------------------------|-------------|---------|
| Clarification on output correction   | M. Grecki                     |             |         |
| Investigations on fast recovery  | O. Hensler                    | 30.10.      |         |
| Looking at possibility of integration of frequency modulation into SMAC              | Y. Renier,<br>D.<br>Melkumyan |             |         |
| Participation confirmation for group outing  | I. Isaev                      | 21.10.      |         |
| Ask for specifications of amplifier crystals of MBI laser for risky emission studies | M. Gross                      |             |         |

Protocol prepared by  
G. Loisch, 15.10.2015