Minutes of RESULTS, PITZ Physics Seminar, 25.07.2013

Project: PITZ
Participants: M.Krasilnikov, G.Kourkafas, I.Isaev, D.Malyutin, M.Otevrel, G.Vashchenko, P.Boonpornprasert, G.Pathak, J.Good, B.Marchetti, F.Stephan, T.Rublack, J.Pokarz, M.Dhondt, W.Xiong, A.Oppelt, F.Tonisch (partly), S.Schreiber (via VC)

Agenda:

1) The new LeCroy scope and its applications (Frank Tonisch)
2) summer students' status reports
3) Discussion Gun 4.3 delivery documentation (M.Krasilnikov)
4) Last longitudinal phase space measurements (D.Malyutin)
5) AOB

Results:

1) The new LeCroy scope has more and better features than the Tektronix scopes. It can be used as normal monitoring scope (like the old scopes), but it also allows to measure spectra with 400 ps resolution (better than sampling ADCs) and analyze the data (in this mode it's forbidden to touch any button of the scope). 4 channels are available and shall be used as follows: LOW.ICT1, HIGH.ICT1, XFEL-Toroid, UV laser intensity (during run periods) / PMTs window + coupler, some RF signals (during conditioning). Installation place to be defined (e.g. laser room).
2) W.Xiong: sorting and understanding existing image analysis programs
   M.Dhondt: create Last Interlock Investigator (LILI), a tool for continuous spectral data saving plus a GUI for displaying it with synchronous time
   J.Tokarz: conceptional design of a new method for ICT signal processing (replacing the old integrators with background substraction)
3) Topics and responsible persons for the topics are defined; first versions of chapters to be provided by 15.8., discussion in PPS on 22.8.
4) The last longitudinal phase space measurements at HEDA1 for 20 and 700 pC bunch charge have been done on July 9-10. Measurement results were presented and problems discussed. Rough agreement with simulations was seen.

Next steps:

What is to be done?	By whom?	Until when?	Done on
Zu (1): Contact to M.Lomperski to prepare scope setup for already defined run measurements	F.Tonisch	a.s.a.p	
Zu (3): Provide first version of your report's section	Defined persons	15.8.13	
Zu (4): Simulate dispersive section and optical setup to properly compare simulation results with measurements	D.Malyutin	soon	

Protocol prepared by A.Oppelt