

## Minutes of RESULTS, PITZ Physics Seminar, 27.09.2012

Project: PITZ

Participants. Mikhail Krasilnikov, Igor Isaev, Martin Khojoyan, Matthias Gross, Frank Stephan, Marek Otevel, Georgeos Kourkafas, Davit Kalantaryan, Yevgeniy Ivanisenko, Anne Oppelt, Roman Martin

### Agenda:

- 1) Y. Ivanisenko: Booster dark current
- 2) M. Krasilnikov: 3D ellipsoidal laser pulses
- 3) AOB

### Results:

- 1) a. Measurement: dark current has narrow momentum spread  
b. ASTRA simulation: broad spectrum with spikes correlating with electrons originating in different cells
- 2) 12% border sharpness means emittance growth of 30% negating gain of ellipsoidal pulses
- 3) a. Everyone should present their current work every 3 month in 10min. talks  
b. Discussion on different image analysis methods, pool of algorithms wished for common usage

### Next steps:

What is to be done?	By whom?	Until when?	Done on
<u>Topic 1</u>			
Investigate: use field probes as electron detectors	Y. Ivanisenko	1. Nov. 2012	
<u>Topic 2</u>			
1) Refine optimization	M. Krasilnikov / M. Khojoyan	1. Dec. 2012	
2) Simulate phase space dilution	M. Krasilnikov / M. Khojoyan	1. Dec. 2012	
<u>Topic 3</u>			
1) First dates for talks: 25th Oct. / 1. Nov. – send email to MK	all		
2) Block diagrams of image analysis algorithms to be established	Programme responsibles (Galina, Marek, Andrey)	1.Dec. 2012	

Protocol prepared by  
Matthias Gross, 27.09.2012