

Minutes of RESULTS, PITZ Physics Seminar, 21.04.2016

Project: PITZ

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Agenda:

- 1) D. Dettmann, "Optical investigations of YAG screens"
- 2) AOB

Results:

1. YAG screens were investigated (surface profile measurements with a laser microscope) to evaluate the defects on the surfaces and types of defects. They are black dots (peaks on the surface), craters, bigger grains on some screens, specific defects induced by removing the transportation package. Sometimes difference between "hills" and "valleys" is few tens of um (overall YAG thickness is 35-80 um for different screens). There are no new flawless screens, but there are some small flawless areas. Fluorescence spectroscopy was used to measure emission spectra at different positions of the screens. Spectra shape remains the same for different spots within a screen, but the intensity varies a lot. But it is hard to say, if it is different response from different defects on the surface or if it is different angular positions of a specimen (improper specimen holder), so the intensity cannot be compared. A discussion is ongoing on the procedure of screen selection for the beamline. What is the best way to measure the intensity of screen fluorescence? How to properly measure a screen resolution? To be continued.
2. Power measurements with the oscillating water temperature. Investigation to be continued.
3. Frank gives away 1 ticket for a soccer game this Saturday. Contact him, if interested.
4. Yves could present current status of PITZ at LINAC conference.
5. Do not use pirate software at DESY!
6. We have choose a restaurant for PITZ collaboration meeting (feedback is needed until the beginning of the next week)
7. Volunteers are needed for XFEL shift participation. Any time you can propose your measurement program. Everyone is welcome. This offer is valid until July.
8. Investigation on the power measurement discrepancy to be continued.
9. Conditioning: Gun fast recovery tests are ongoing

What is to be done?	By whom?	Until when?	Done on
Repeat the measurements for Al substrate screens, make re-measurement of the YAG film thicknesses.	DD		
Continue evaluation of the screens	DD		

Continue power measurements with the oscillating temperature.	MK, shift crew		

Protocol prepared by
O. Lishilin 2016-04-21