

Minutes of PITZ Physics Seminar, 20.05.2020

Project: PITZ

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Agenda:

- 1) AoB
- 2) Talk by Pengwei – A simplified model for negative correlation of QE and thermal emittance

Results:

- 1) AoB
 - a. PITZ Collaboration Meeting: Please prepare your slides for Frank
 - b. Community masks available at PITZ in Franks office. Come and pick them up.
 - c. Public Holiday on Thursday 21st
 - d. Was there progress on the cooling of the cathode, to improve the conditions in the gun? No.
- 2) Talk by Pengwei
 - a. Non-zero rf and solenoid fields, when moving away from the gun centre. Is this negligible? In Astra this is considered, therefore it is considered.
 - b. Are you considering the different fields? Or are you simply just determining the transfer matrix elements, and ignore the single contributions from solenoid and rf gun?
 - c. You say that Cs excess is homogeneous, while in the second point it is inhomogeneous. Please explain!
 - d. Thickness of Tellurium on slide 'Previous studies'? Same as INFAN paper. Should be 10 nm Te.
 - e. HQ: Maybe Laura can comment? Typically 10 nm of Te, i.e. standard cathodes
 - f. MK: Page 'Review of experimental results'. There is a correlation for each date, but not for thermal emittance data between different shifts. Why? What is the mechanism, which causes that?
 - g. HQ: Should the paper submission be postponed? FS: Consider the comments in the discussion in the paper, prepare the new version, and send it around again. We have to see, how quickly we can proceed with more measurements. When the paper is ready, we can still consider whether we submit it or wait for more measurement data.
 - h. MK: Data is only for high gradients, right? HQ: We also have data for low gradients.
 - i. Use cathode with high QE for next run, as a lot of charge is needed.

Next steps:

What is to be done?	By whom?	Until when?	Done on

Protocol prepared by
R. Niemczyk, 20th May 2020
(Name, Date)