

Minutes of RESULTS, PITZ Physics Seminar, 20.02.2014

Project: PITZ

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Agenda:

- 1) I.Isaev: Simulations of the gun frequency shift for different cathode springs.
- 2) Run coordination
- 3) AOB

Results:

- 1) Approach: Spring modelled as a volume between the plug and the gun back-plate of variable conductivity. Behavior studied for different conductivity of that volume.
 - The p2p resonant frequency (, that at min Q-parameter,) shift is 40kHz which corresponds to ~2degC in the resonance temperature.
 - Shifting cathode 1mm in the z-direction causes res. frequency shift 10-20kHz (less than 1degC)
 - We saw 3degC shift however in the experiment.
 - 2nd part: Frequency shift dependence on the number of the springs “leafs”.
 - The p2p difference in resonance temperature ~1degC.

2)

Next steps:

What is to be done?	By whom?	Until when?	Done on
Dirk should send us the results of his simulations.	Dirk Lipka (Igor Isaev contact person)		

Protocol prepared by Marek Otevrel