

Minutes of RESULTS, PITZ Physics Seminar, 2018-04-19

Project: PITZ

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1) Agenda

1. G. Shu “Recent research activities at IHEP”
2. Run coordination
3. AOB

2) Results:

1. CW buncher for PAPS project (1.3GHz 500 keV CW gun) is presented. RF tuners (scaled KEK), cooling design, CW rf coupler design and parameters are shown. RF window in the coupler is protected from dust on an air side with a Teflon window (comment from Frank: we should not use Teflon for our design). RF breakdown analysis was carried out.

Another project is S band 6 MW coupled accelerator structure for medical use. RF design and parameters are presented.

Next project is C band pulse compressor. Two designs are shown: SLED (for IFNF) and BOC (for future interest) Cold test results for both compressors are shown.

R&D high power RF components: X band magic tees for KEK, S band directional couplers for PAL, S band high vacuum circulator.

2. Run coordination. Extensive discussion on how to solve the SMAC+EC issues. Very extensive discussion on dark current. Dark current momentum is measured.

Agreement on DC treatment: Mo1->Mo2->Cs2Te->Mo2(full insertion depth)->Mo2(reduced depth). Continue long pulse conditioning (with Mo cathode)

3. 28th of June – annual workouting

20th of July – joint Elbe/flash THz workshop

Prepared by O. Lishilin