# Minutes of PITZ Physics Seminar, 27.02.2020

Project: PITZ
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## Agenda:

1) AoB
2) Talk by Guan Shu – Analysis on the quadrupole calibration at PITZ

## Results:

1) Check your shift payment: It was erroneous in at least one case
2) Publication policy: Ye's PRAB paper's author list is correct according to PITZ publication list (measurements were published before, only simulations were added).
3) Publication policy: A general acknowledgement statement should be added, when older data is being presented
4) PITZ publication addendum is under discussion
5) List of shift takers should be organised (less work for main authors to determine co-author list)
6) Publications should be analysed as 'strongly' as possible, to prohibit other people (outside PITZ) to further analyse 'our' data. Hence, 'publishing a proceeding to get rid of coauthors' is not recommended
7) Anne has list, who made how many shifts in each year (starting 2014)
8) Document data taking on shift thoroughly. Even after years (!) others (!) have to be able to understand the measurement
9) Perhaps quadrupole magnet cabling to be checked. Do positive currents focus in the vertical plane?
10) Quadrupole magnets have residual gradient (at 0 Amps) when setting the quadrupole magnet (after cycling before setting the gradient)
11) Slide 8: Why does the variation depend on the quadrupole current? Perhaps this is within the error bar, but they were not determined
12) Grygorii: The dependence on slide 8 should be linear
13) Different excitation procedures yield different transfer matrices
14) Frank: We have to set magnets all in the same way, to make measurements more repeatable
15) **Frank: Correct way to set quadrupole magnets: Degauss quadrupole magnets -> Go directly (and linearly, without going back) to the value**

## Next steps:

| What is to be done? | By whom? | Until when? | Done on |
|---|---|---|---|
| Check quadrupole magnet calibration | First shift in next run | During the first shift, where beam is | |

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|---|---|---|---|
| | | ready | |
| Write degauss function in Matlab, using **identical** procedure as in GUI | Osip | | |
| Calibrate all quadrupole magnets, so that the calibration can be reused (since they should not change) | Guan | | |
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Protocol prepared by

Raffael Niemczyk