

TCS-PC meeting

Kazuhiro Agatsuma

2016/Mar./3

To do list

Virgo site

Optical layout

- Test beam design (Laura, Annalisa): **Calculation done for PC2**
- ~~One beam or two beam scanning discussion (Kazuhiro, Bas, Annalisa)~~
- Setup of optical components (1 week for each port): 2 weeks for PC2 and PC3, 3days for EIB re-setup
 - Measure beam profile
 - Measure beam power
 - Check RF signal

Calculation

- ~~SNR and sensitivity calculation (Kazuhiro)~~
- Simulation: whole phase camera (Laura: Finesse, Jerome: Oscar, Annalisa: Finesse, Alessio: Matlab)

AOM

- Power loss investigation (checking optical feedthrough) (Kazuhiro): **Components has been delivered**
- Increase the power of amplifier (Martin, Kazuhiro): **Procurement is in progress**

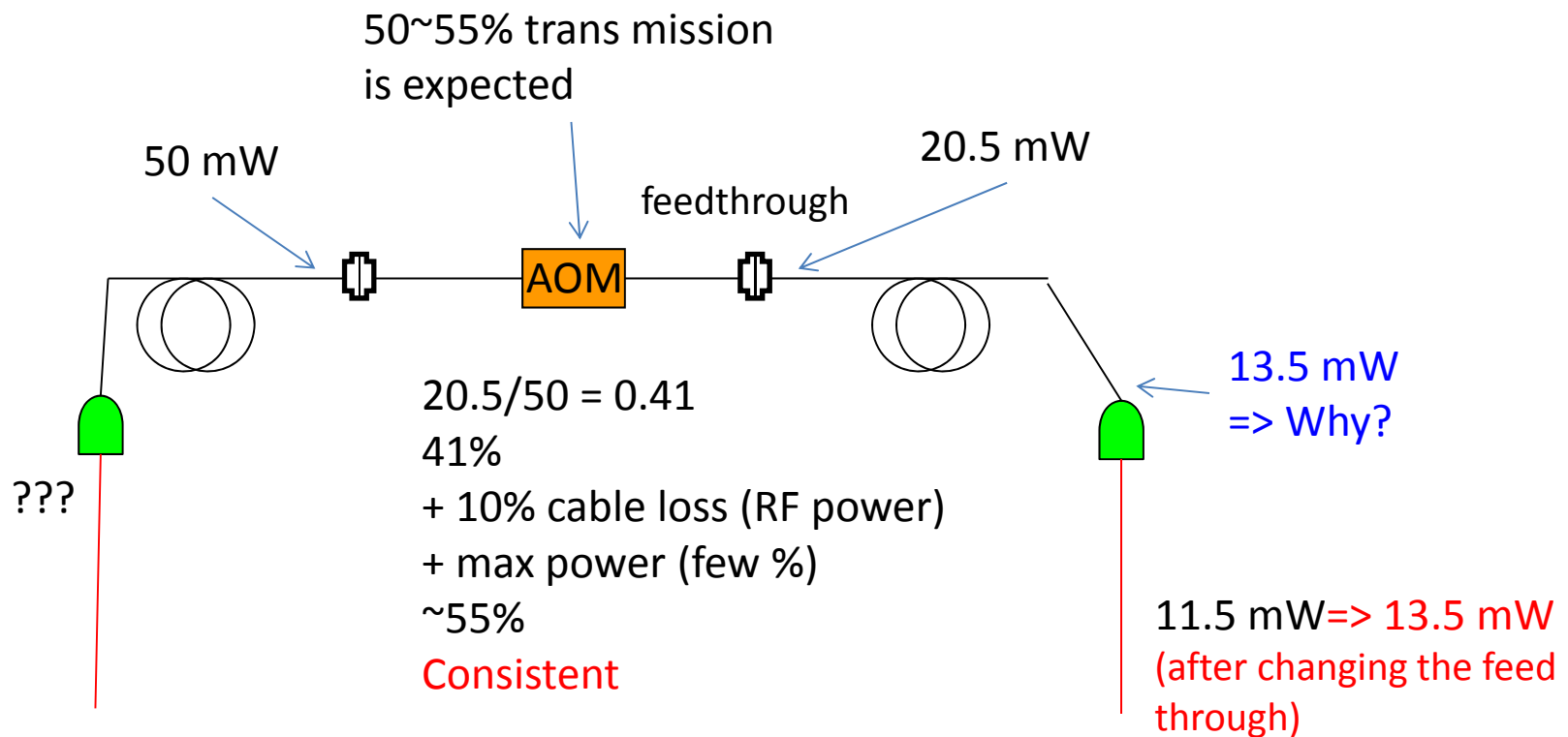
PD

- Linearity check (Martin, Kazuhiro): **Laser preparation (Laser safety in Nikhef is checked => Oscar)**
- Matching DC saturation to AC saturation (Martin, Guido): **On going**

Readout system

- DAC channels for scanning (Martin, LAPP)
- Connection with Real DAQ (Martin, Mesfin, LAPP)
 - Control Software **(50% done)**
 - ~~Dictionary~~
 - TOLM ver.2 (Martin, Mesfin, LAPP) : **On going**
- Procurement of cables and electronics (Martin)
 - The cables from (electrical splitter in) the EE room to DAQ room and detection room have to be put.
 - => Martin will ask Flavio to put them.

Laser power measurement



Optical feedthrough is suspicious for the large loss

To Do at the next visit (PC1a)

- Laser power measurement (@Laser bench, EIB, and Atrium): 0.5-1 day
 - Laser injection
 - PC1a reference beam
 - PC1a test beam (MC lock, MC unlock)
- Power loss investigation of the reference beam
 - Check of the optical fiber connections
- Update of firmware of FPGA
- Commissioning (PC1a)
 - Comparison with the scanning Fabry-Perot
 - Spectrum measurement: @EE-room with/without readout electronics, (@EIB without readout system: option)
- Replacement of a mirror with a flip mirror (option)

Schedules

– Visiting Virgo site

- 14th-18th/Mar. (most convenient)
- 7th-11th/Mar. (2nd convenient)
- 21st-25th/Mar. (3rd)

– Conferences

- ~~GW annual meeting in the Netherlands (@Nikhef):~~
2nd/March
- The 21st Symposium on Astroparticle Physics in the Netherlands: 31st/March, 1st/April
- FYSICA: 8th/April

– Next meeting

- TCS-PC meeting: 18th/March???