



PSL status

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Power stabilization boxes

Virgo+ laser reshuffling

R&D for final amplifier



Power stabilization boxes

- ❑ Position of the photodiodes box and pre-amplifiers box, frozen with the different SS (INJ, SAT, DAQ, ..)
- ❑ Fabrication of the boxes launched (for End of June)
- ❑ Different mounting & tests planned in July on site (see talk previous VW)



V+ laser re-installation: planning

- ❑ After clean room ready (November 2013)
- ❑ Move the V+ mounting to the new laser table (mid-Nov 2013):
 - Active components to be tested (in case of trouble, deadline is 8/5/14)
- ❑ V+ laser ready with the same electronics (end of 2013)
- ❑ Renewal of electronics when the V+ laser is validated on the new place:
 - Laser power supply: simplification
 - Control electronics, servos: new modules



V+ laser: HW integration

After discussions between Frederic and the concerned SS:

- ❑ Laser's power supply kept located in the EE room (as previously)
- ❑ 60W amplifier's power supply kept in the EE room (as previously):
 - Cables of limited length,
 - After checked out the availability of the locations
- ❑ Chiller of both laser and amplifier kept next to EE room (as foreseen for AdV)
- ❑ Servo electronics located in the INJ electronic lab
- ❑ Master laser's power supply kept beside the laser table
 - If noisy, possibility to swap to a fibered master in 2014



V+ laser: simplification of the set-up

- ❑ Pre-mode-cleaner analog servo to be replaced by digital servo
 - With the help of Loic R.
- ❑ Dephasing crates replaced by cables of given lengths
- ❑ DC voltages supplied on site by EGO
- ❑ Get rid of the many non-vital monitoring channels (DC monitor, quadrant signals, etc...)



R&D for final amplifier (2015)

- A few issues to be solved:
 - If shot noise non reached at the RF frequencies (@ 6MHz), learn to control the RIN with EO modulators (in progress)

- Continue investigation of laser vendors

- We will start the coherent addition of 2 lasers next fall (if lasers & components available)