

February Shift Plans

Rebecca Ramjiawan, Doug Bett

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FONT Shift Plans - February

- Two nominal optics shifts and a high-beta optics shift:
 - 1-BPM feedback on waist – now that we can stabilise to ~ 40 nm, we aim to demonstrate stabilisation of the waist with nominal optics.
 - Feedback with position and angle information – perform feedback with the waist at IPA using information from IPA and IPC. As IPC is far off-waist this is angle information.
 - Test Colin's new processor.
 - Try digitising our ring clock signal to diagnose our sample jump problems.
 - Charge and attenuation scan to test behaviour of calibration constant and resolution – high beta optics.
 - Test a new method of calculating our feedback gains – fitting to the data.
 - Redo latency scan.
- For us to be able to perform feedback using angle information from an off-waist BPM, we need to be able to attenuate this BPM separately to the on-waist BPM. Any word from Terunuma-san?

Set Up

- Install Colin's processor.
- Reduce delay on reference signal – to see baseline before signal.
- Digitise output of unused second stage processor signal, with correctly terminated input – to monitor the LO timing.
- Take 70 dB baseline waveforms, with and without baseline removal.
- Swap the firmware (FW with longer sample hold off).
- Look at stripline signal and trigger on scope, to test stability?