

Report from Glasgow

K.A.Strain

GEO-University of Glasgow

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Phase 1 SR experiments

- SR system built (no PR)
- Initial locking of arm cavities OK.
- Tests of new readout ports underway.
- Final report due summer
 - signals agree with models?
 - 120 MHz modulation and beat demodulation
 - prepares for main experiment with PR

Phase 2 DR/RSE experiment

- Delays due to temperature problems in lab (fixed) and chronic shortage of people (relieved by UF participation).
- Triple pendulums first article installed: OK.
- Double pendulums OK, ready for installation.
- Laser bench optics installed.
- Vacuum/cleanliness OK

Timetable

- Depends on recruiting new postdoc (May)
- Depends on continued support from UF.
- Depends on recruiting electronics technician (April).
- Given these it should just be possible to meet the need for input to the 40m program

Other work

- Keeping flexibility over whether to test DC readout or not
- An initial experiment on power stabilisation is concluding.
 - Initial tests in air, no vibration isolation, clean but slightly noisy lab.
 - Preliminary result ~ -154 dBC/1Hz noise at around 20 Hz
 - Limitations are under investigation (complex mixture of effects suspected)