In attendance:

- @AEI: B. Allen, M. Papa
- @CC: N. Christensen
- @UGLA: M. Pitkin
- @LANL: R. Dupuis
- @LHO: M. Landry, G. Mendell
- @UM: D. Chin
- @PSU: I. Jones
- @UB: C. Messenger, V. Rae
- @UWM: X. Siemens

1. Time domain calibration (BA)

   (a) discrete changes in initial GEO calibrated S1 data rang off burst filters
   (b) instead, GEO now employ a time domain filter with continuously varying gain
   (c) BA notest that, if we had our current calibration functions in the form of FIR or IIR filters, both $H_0/C_0$ and $1/C_0$, then could adapt GEO method readily
   (d) since $\alpha$’s and $\beta$’s calculated once per min, fit with splines at 16384 Hz.
   (e) ML asks if Soumya’s method, recently proposed at the Hanover LSC, is same as this? BA - probably. Will see about sending around Soumya’s notes on time-domain calibration. BA notes, most useful to have model, ML agrees to post [Ed. now available at calibration webpage].
   (f) XS agrees to start looking into time-domain calibration issues.

2. Hardware injections revisited (XS)

   (a) results posted at http://www.lsc-group.phys.uwm.edu/siemens/injections_revisited.html
   (b) strength of injection was smaller than expected (calibration error; actual signals were 0.78 (H1) and 0.83 (H2) of expected injection
   (c) agreement with expected $F^*$ and ComputeFStatistic is good, in most cases below one sigma
(d) used old code (non running median) to produce these numbers
(e) MAP thinks running median result should get better for H1
(f) no real difference between 60s and 1800s SFTs

3. Time domain on injections (RD)
   (a) beautiful results at http://www.astro.gla.ac.uk/users/rejean/lsc/S2injections/
   (b) *can now retrieve both signals, with and without spindown*
   (c) all parameters estimated, phase of 90 degrees in all three IFOs
   (d) initial calibration used
   (e) earlier problems resulted when RA and dec inadvertently swapped
   (f) BA: “crow from the rooftops about this very nice result”
   (g) XS asks about sign of DARM control
   (h) NC: MCMC results for signal one for H1, H2, match RD’s. See http://physics.carleton.edu/Research/ligo/S2injectCW.html
      Expect same for signal 2.
   (i) MAP asks for investigations page link, RD agrees

4. Noise estimation (CM)
   (a) CM applying running median code sent by MAP
   (b) See: http://www.sr.bham.ac.uk/cm/S2investigations/NoiseEstimation/

5. Noise floor estimation (MP)
   (a) MP posted results of studies at the S2 investigations page: http://www.lsc-group.phys.uwm.edu/pulgroup/investigations/s2index.html
   (b) want to estimate noise but remove effect of lines
   (c) don’t analyze this data (with regions excluded); just estimate the noise this way!!
   (d) iterative cuts are made based on thresholds, stop when no lines above threshold
   (e) different thresholds studied; with weak signal, doesn’t help and you underestimate noise... for strong noise helps a lot.

6. Supernova remnants (IJ)
   (a) what we’d like is listing of galactic SN names, ages, distances, locations in sky, comment like whether or not compact source present
   (b) given mean kick velocity of about 450km/s, age and distance combine to yield patch size in sky to search for : 0.2 degrees for nominal values
   (c) David Green website has 230 known galactic SN, about 20% have distances with large error bars: 0.8kpc is likely closest
   (d) age estimates rarer. IJ suggests lit search might yield object ejecta velocity - thus could extract age, but this would be time consuming.
   (e) IJ asks how compute intensive will such a search be? Should he draw up shortlist of candidates? Or will we get through them all? MAP: if no spindown, we will get through all. If spindown, we need then to target. Debate ensues on what computation time is required - MAP to send around estimates.
7. A.O.B.

(a) MAP asks if any objections to posting our list of suggested referees? No (all).

Next telecon:
Thursday, 11 Sep 2003 at 8:30am PST (10:30am CST, 15:30 UTC, 17:30 CET)