Summary of Stochastic Upper Limit Group Activities

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http://feynman.utb.edu/∼joe/research/stochastic/upperlimits/

Activities - Current/Planned

1. Hardware signal injection of SB signals during E7.
2. Analytic calculation of expected upper limits (~ 50 hrs):
   $\Omega_{gw} \sim 2 \times 10^5$ for L1-H2, $\Omega_{gw} \sim 6 \times 10^4$ for H1-H2
3. Modifications to stochastic DSO nearly complete.
4. Coherence measurements of AS_Q show little power line coherence for L1-H2 correlations.
5. Power line monitor coherence investigations (S. Klimenko and others) suggest coherence should average out for 90 s data stretches.
6. Systematic investigation of line removal code in datacon-dAPI is currently underway (A. Searle).
7. Plan to investigate the effect of line removal on cross-correlated noise and upper limit (S. Klimenko, A. Searle).
8. Plan to inject simulated SB signals into real data for Monte Carlo simulations (S. Bose, T. Reginbau).
9. Plan to implement dithering in datacondAPI (ANU).
10. Plans to correlate LLO with ALLEGRO, and include GEO data into cross-correlated noise investigations.
11. Face-to-face meeting: UTB??