



Reviewer Comments on the S3/S4/S5 TDS Neutron Star Searches

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TDS Documentation

- Published articles
 - » S1: PRD **69** (2004) art. no. 082004.
 - » S2: PRL **94** (2005) art. no. 181103.
- Investigation bulletin boards
 - » <http://www.lsc-group.phys.uwm.edu/pulgroup/investigations/s3index.html#knownpulsartd>
 - » <http://www.lsc-group.phys.uwm.edu/pulgroup/investigations/s4index.html#knownpulsartd>
 - » <http://www.lsc-group.phys.uwm.edu/pulgroup/investigations/s5index.html#knownpulsartd>
- Review bulletin boards
 - » <http://www.ligo.caltech.edu/~pshawhan/lsc/pulreview/s3td/>
 - » <http://www.ligo.caltech.edu/~pshawhan/lsc/pulreview/s5td/>



S3/S4 Analysis

- Six review telecons since March 2005
- S3 preliminary results approved for 2005 Amaldi conference
- Analysis and review are nearly complete- technique is mature, a few minor issues are still pending.
- Article is in preparation- format is rough, content not yet internally reviewed



S5 Analysis

- Obviously ongoing, one review so far
- Upper limits based upon ~2 months' data from H1 and L1, using essentially the same method and code as the S3/S4 analysis (which is essentially the S2 analysis)
- The review committee recommends that Matt's preliminary results be approved for the APS meeting

Pulsar Selection

- Upper limits for 73 pulsars
 - » This is fewer than for S4; old ephemerides decay in value to us
- J057- 6910 is not one of these pulsars (none of the pulsars with large timing noise are included)
- Level of timing noise, when unknown for a pulsar, is inferred from known period derivative.
 - » It would be better to know the timing directly

