

LIGO Inter-IFO Coherence

Kaice T. Reilly

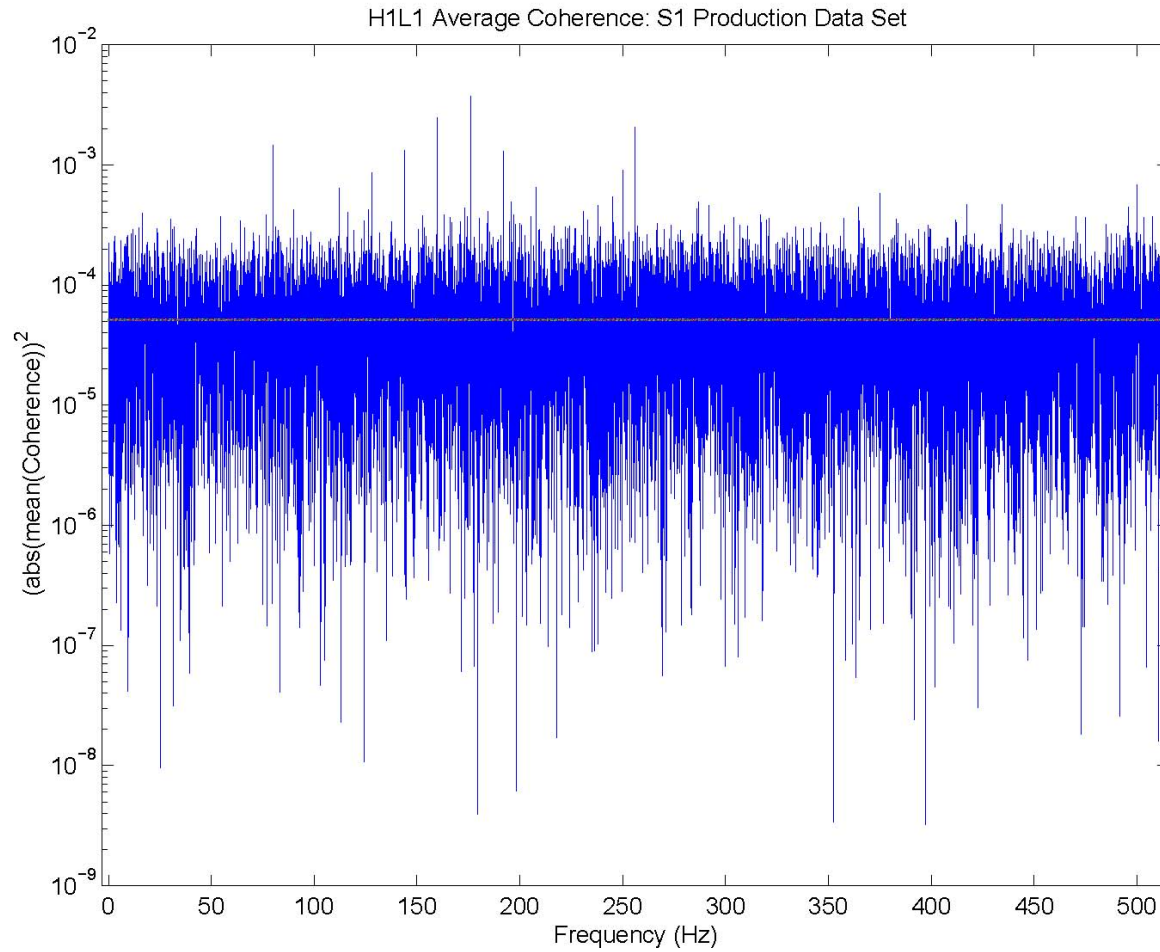
14th LSC Meeting

13 November 2003

Outline

- S1 Coherence
 - H1H2 structure but lacking sensitivity
 - HL 60 Hz and 16 Hz lines present
- S2 Coherence
 - Greater sensitivity
 - Significant structure see in H1H2
- E10 Coherence
 - HL pairs sill look good
 - H1H2 looks great

H1L1 S1 Coherence

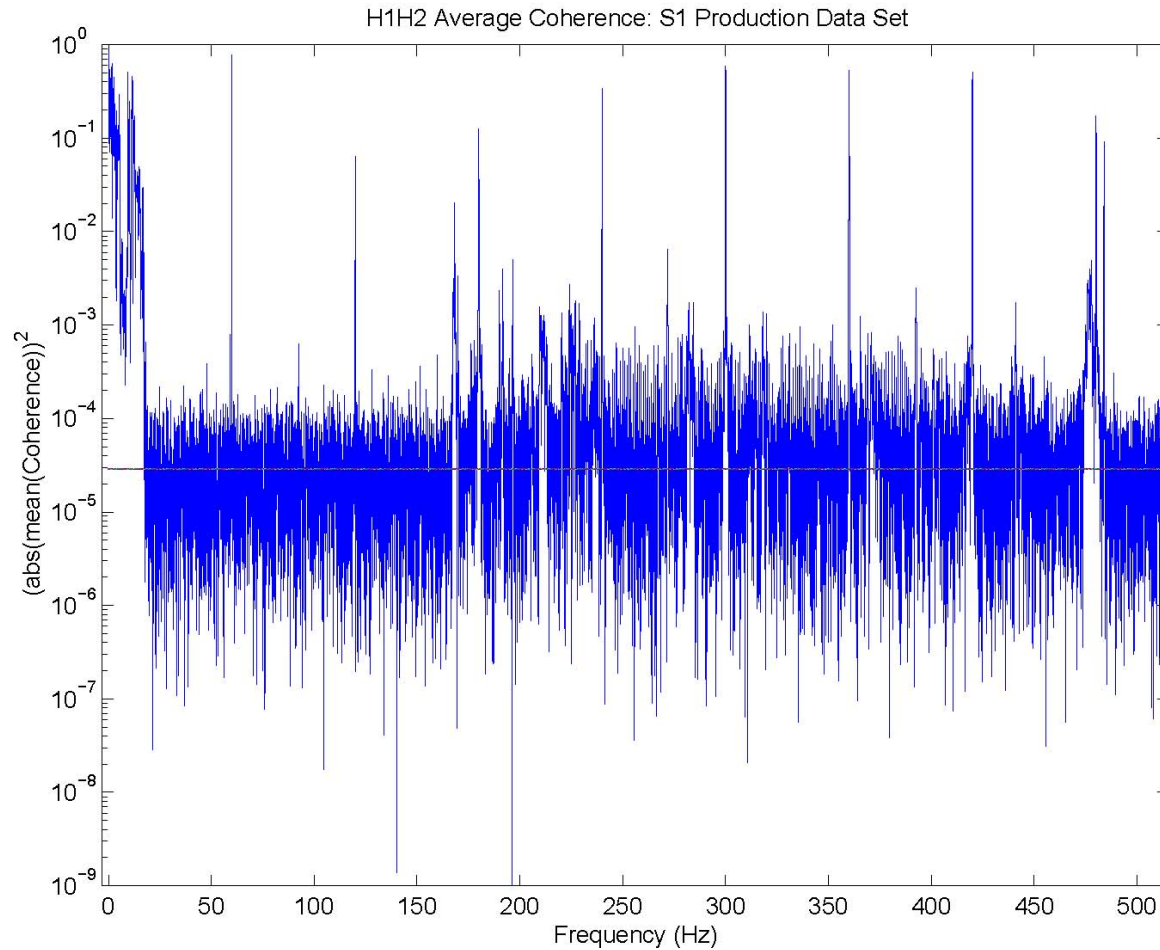


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LIGO-G030620-00-Z

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H1H2 S1 Coherence

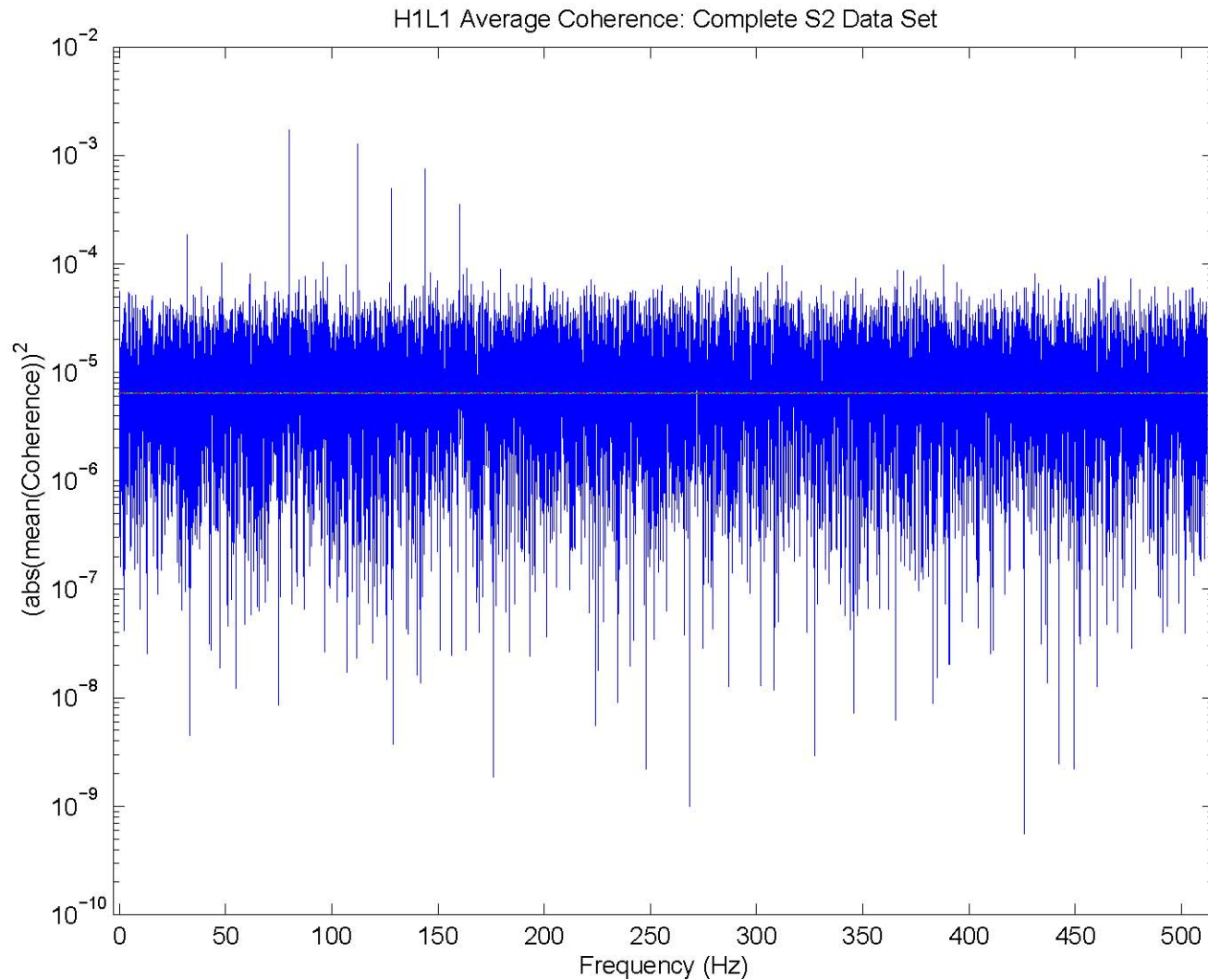


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H1L1 S2 Coherence

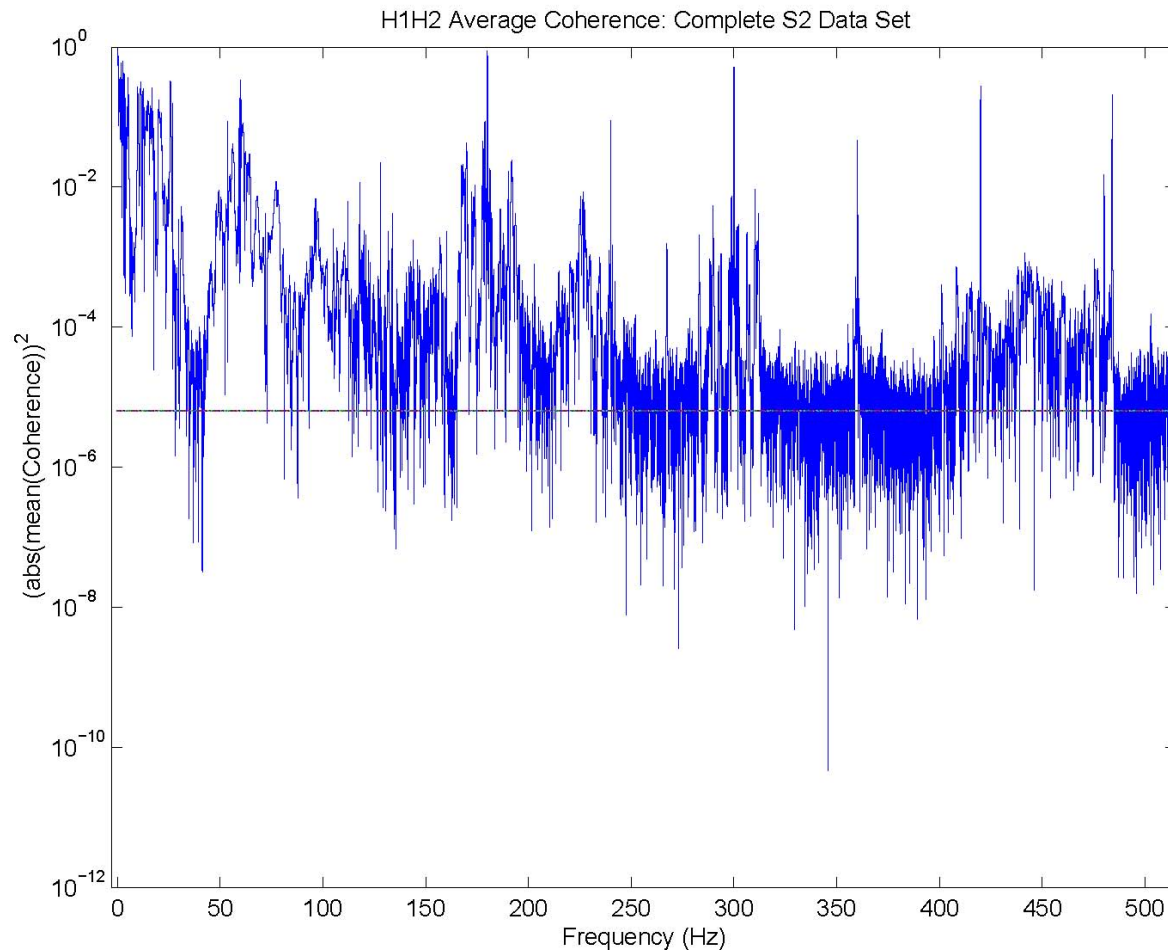


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H1H2 S2 Coherence

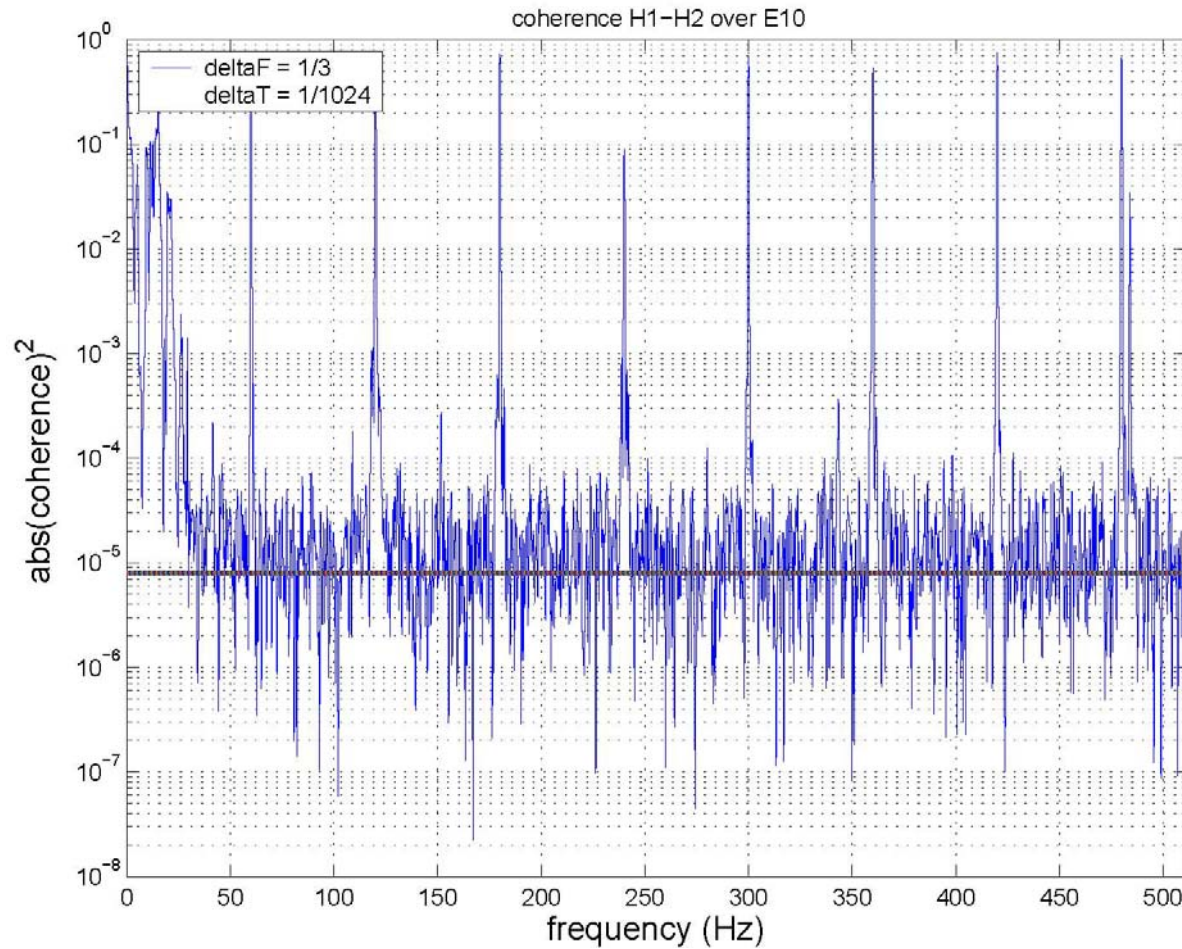


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E10 H1H2 Coherence

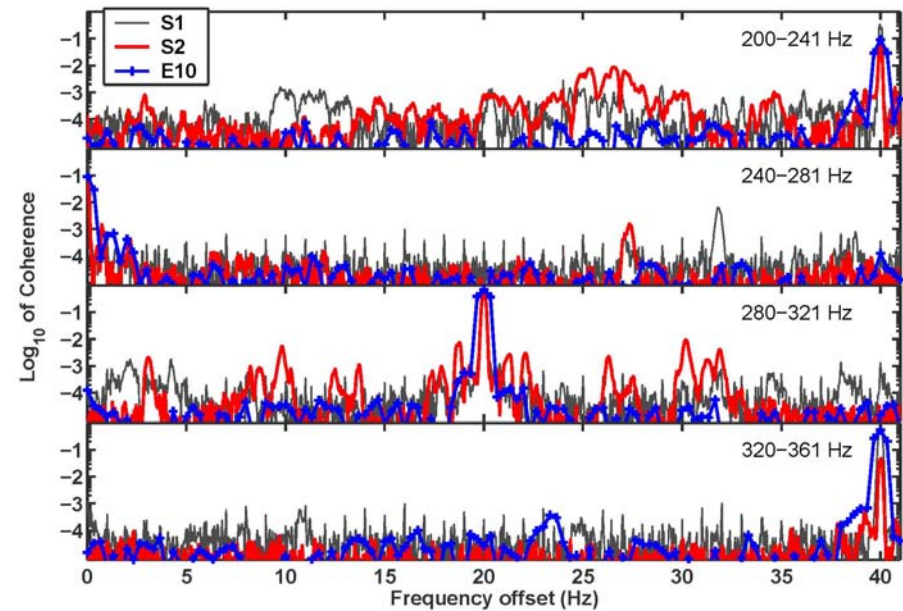
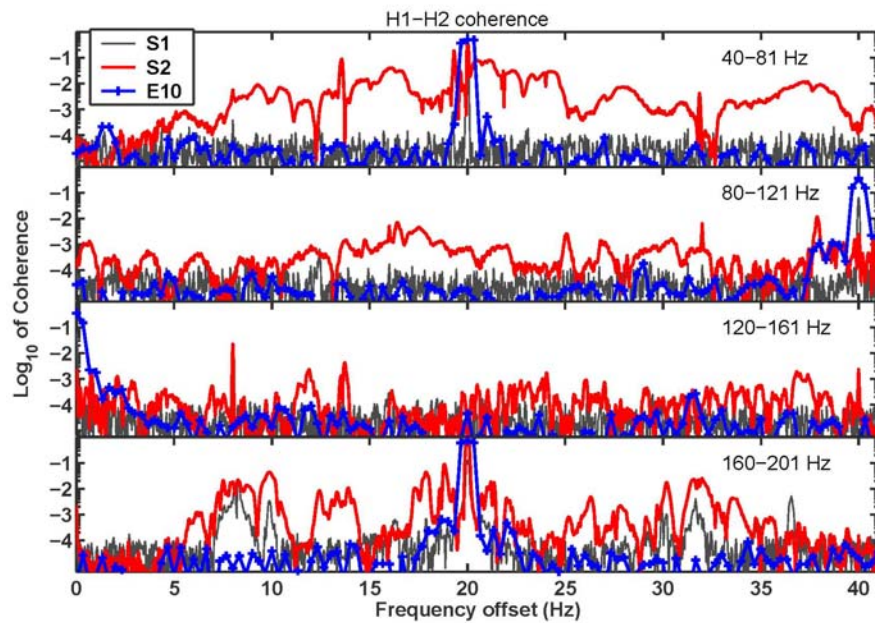


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Summary of H1H2: S1-E10



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Conclusions

- Instrument sensitivities improving S1->S2
- S2->E10 detector improvements eliminated much of the H1H2 correlations
- Coherence is currently being looked at in other channels