LIGO

LSC

Noise Line Searches for LIGO S6

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LIGO Noise Line Searches: Fscan

Identify noise frequencies in the GW data, and find their sources using Fscans, a pulsar search code.

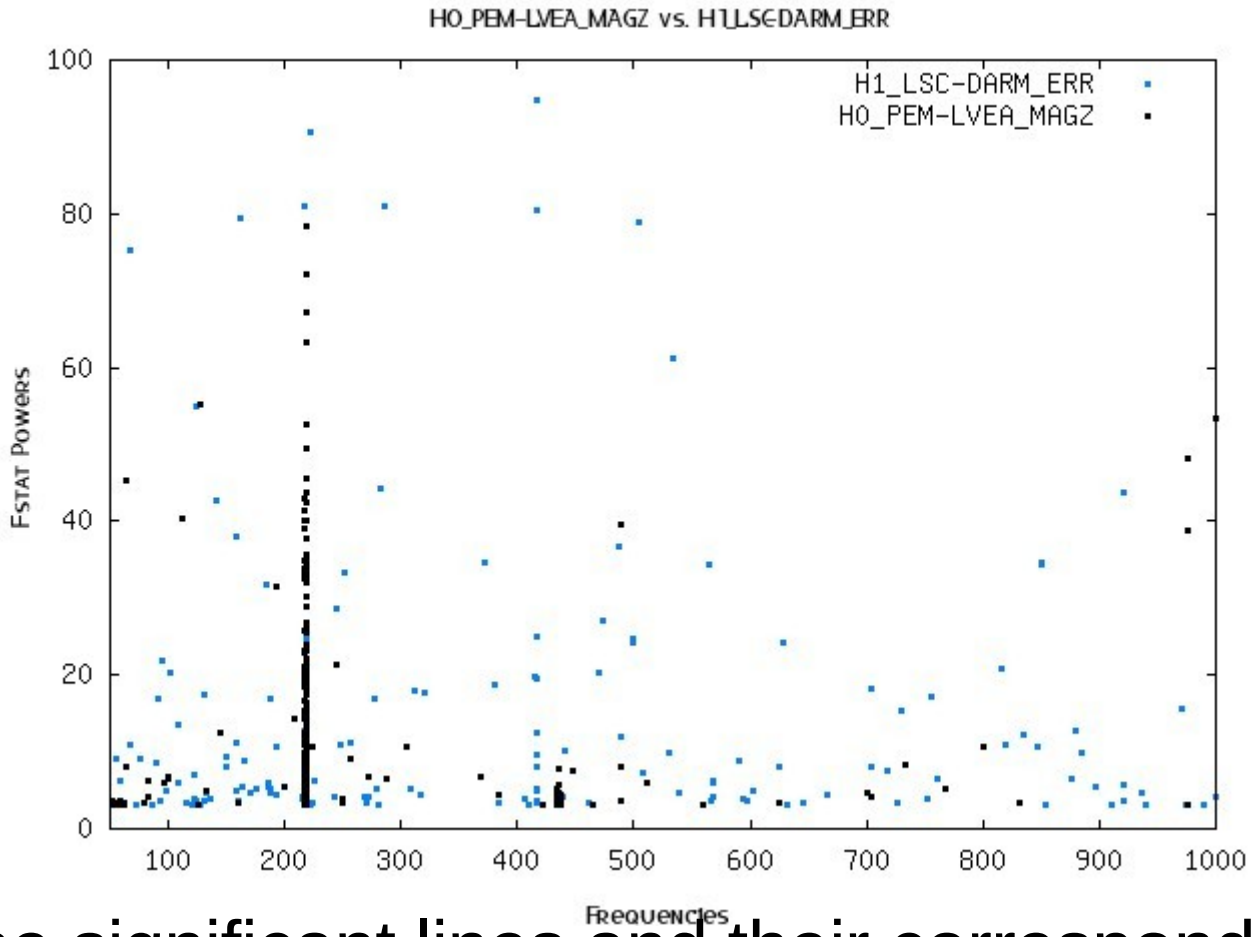

Figure 1: The significant lines and their corresponding Fscan powers for H1 GW signal channel and a environmental monitoring channel (in this case, a magnetometer).

Noise Line Searches: Coherence

The coherence code calculates the coherence between the gravitational wave channel and all the available channels in the reduced data set (RDS). These results are also used to find noise lines, and their sources.

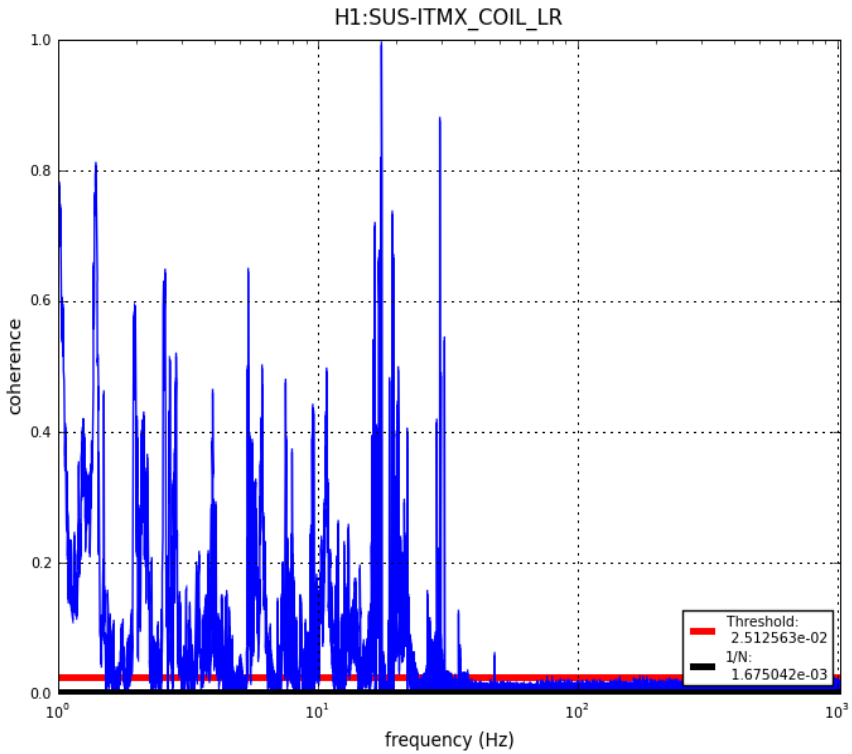

Figure 2: Coherence vs. frequency for an example channel.