Abstract Submitted
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Modeling signals in gravitational wave interferometric data GAMAGE DANNANGODA, University of Texas Brownsville — The current generation of gravitational wave detectors e.g. LIGO (www.ligo.caltech.edu) are taking data in the "science" mode. The data received at the output is a mixture of many different kinds of signals of instrumental and environmental origin (the detector "noise"). This study focuses on how to model these spurious signals so that they can later be subjected to further analysis to classify them into groups. Signals from different instrumental and environmental sources bear different signatures and thus have different waveforms. A low order ARMA can model these signals. The method is demonstrated by application on real data.

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