

The 5th Kagra International Workshop / The 1st Kagra-Virgo-3G Detectors Workshop

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LIGO-Virgo Detector Characterization (DetChar)

Thursday, 14 February 2019 12:30 (30 minutes)

Detector characterization (DetChar) is a key component of the direct search for gravitational waves (GW) performed by the global network of large scale ground-based interferometric detectors –the LIGO-Hanford and LIGO-Livingston instruments, the Virgo detector and soon KAGRA. DetChar contributions are manifold: to vet the GW transient candidates detected by the astrophysical analyses; to help these methods to reduce their false alarm rate and hence increase their sensitivity; to support commissioning activities by hunting down noise sources, monitoring changes in the instrument performance and more globally assessing the quality of the raw and reprocessed data. In this talk, I will describe the LIGO and Virgo DetChar activities, emphasizing our joint plans for the coming third Observation Run and the associated open public alert era. I will also stress the existing tools, methods, and strategies that could be of interest for the developing KAGRA DetChar group, including strong interest in having the three DetChar groups work together: joint projects, visiting scientists, etc.

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