

Abstract Submitted
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Regression of Environmental and Instrumental Noise in advance LIGO¹ CARLOS FILIPE DA SILVA COSTA, SERGEY KLIMENKO, GUENAKH V. MITSELMAKHER, Univ of Florida - Gainesville, LIGO COLLABORATION — The strain sensitivity of advanced LIGO has been improved by a factor three with respect to the initial LIGO. As advanced LIGO is commissioned, the existing noise sources may start to affect its sensitivity and new unexpected environmental and instrumental noise sources may appear. The noise regression method can be used to identify noise sources and subtract noise from the data by using auxiliary channels. I will present the regression method and its applications to the advanced LIGO data.

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