

Abstract Submitted  
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**Seismic investigations for future generations of gravitational-wave detectors** JAN HARMS, MICHAEL COUGHLIN, LIGO COLLABORATION — Gravity perturbations generated by seismic fields will pose a new noise source in future generations of gravitational-wave detectors. This noise can be estimated based on seismic data. We present a characterization of seismic noise throughout a large part of the US and we discuss the environmental conditions that could impact methods to mitigate noise from gravity perturbations, and which will have to be addressed in the process of a site selection.

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