

Abstract Submitted  
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**Gravitational wave detection with optical lattice clocks** SHIMON KOLKOWITZ, JILA, University of Colorado, Boulder, NICK LANGELLIER, Harvard University, IGOR PIKOVSKI, ITAMP, Harvard University, MIKHAIL LUKIN, RON WALSWORTH, Harvard University, JUN YE, JILA, University of Colorado, Boulder — We discuss the prospects for using optical lattice clocks for gravitational wave detection. We compare a space-based clock detector to other existing and proposed techniques, and analyze its potential for detecting low-frequency gravitational waves.

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