## Abstract Submitted for the APR05 Meeting of The American Physical Society

Status of Einstein-Aether Theory CHRISTOPHER ELING, TED JACOBSON, University of Maryland, DAVID MATTINGLY, University of California at Davis — Einstein-Aether theory is Einstein gravity coupled to a dynamical unit timelike vector field. This provides a generally covariant theory of Lorentz symmetry breaking that can be tested and constrained by observations. The current understanding of the theory, its consequences, and the observational constraints will be summarized.

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