

Abstract Submitted
for the APR06 Meeting of
The American Physical Society

Nambu-Goldstone Modes in Theories with Spontaneous Lorentz Violation ROBERT BLUHM, Colby College, ALAN KOSTELECKY, Indiana University — The fate of the Nambu-Goldstone (NG) modes is examined in gravitational theories with spontaneous Lorentz violation. It is shown that the NG modes due to spontaneous Lorentz and diffeomorphism breaking can be naturally incorporated into the theory using a vierbein approach. The question of whether a Higgs mechanism occurs is examined as well. Vector models with spontaneous Lorentz violation called bumblebee models are used as an example.

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Date submitted: 12 Jan 2006

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