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**The superluminal motion of sources in Lorentz-violating universes** TAYLOR COPELAND, MICHAEL SEIFERT, LESLIE BROWN, Connecticut College — Many models of Lorentz symmetry violation can result in a speed of light that is non-isotropic. The phenomenon of superluminal jets is dependent both on the direction of travel of relativistic jets emitted from active galactic nuclei (AGNs) and the direction of light propagation, and could serve as a sensitive probe of Lorentz symmetry breaking. We designed a simulation of a Universe in which Lorentz symmetry is broken, and investigated the effects of this breaking on the distribution of superluminal jets on the sky. An anisotropic distribution of sources was found in this model Universe, with varying patterns depending on the form of the effective metric for light propagation.

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