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The Fourth Dimension and Expansion JOHN M. KULICK — A flatland universe can be visualized as moving in a vertical dimension that is "unobservable." The following hypothetical geometric model adds a fourth "unseen" dimension to spacetime that conforms to a specific geometric inter-dimensional relationship with our "observable" spacetime that is uniformly expanding and in motion. Physical properties such as "intrinsic energy" for a rest mass and inertia become kinematically described. A controversial alternative explanation for a cosmological red shift becomes possible while still preserving the accepted physics by which the wavelength of a photon increases while traveling through an expanding spacetime field.

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