

Abstract Submitted
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Kinematically Accelerated Repulsions Due to Relative Motion between Mass Particles in an Accelerating Universe DAVID SAVICKAS, Western New England University — An accelerated expansion of the universe, due only to relative particle motion, is described here in the form of a particular model that illustrates its physical cause. A simplified three particle universe is considered here by defining coordinate positions for effective mass-points because their size is extremely small compared to the distances between them. The three particles initially form a static isosceles triangular configuration. The third particle at the triangle's apex could only then determine its position relative to the triangle by measuring the apex angle subtended by the base particles. If the two base particles then exert for an instant a force between only themselves, they will move away from each other while the third particle could physically maintain its position relative to the universe only by referring to these other two existing particles. It would then be required that the apex particle would accelerate outwards and away from the base particles in order to regain the smaller size of the original apex angle and subsequently generate a Hubble expansion for the particles.

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