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Gravity Due to the Expansion of Matter and Distortion of Hyperspace

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Abstract : In this paper, we explain gravitational attraction as the consequence of the dynamics of four-dimensional bodies and the consequent distortion of space. This approach provides an alternative direction to understand various physical phenomena based on the existence of the fourth spatial dimension. For this interpretation, we formulate the acceleration due to gravity and orbital velocity based on the accelerating expansion of three-dimensional symmetric bodies. It is also shown how distortion in space caused by the dynamics of four-dimensional bodies counterbalances the effect of expansion. We find that the motion of four-dimensional bodies through four-dimensional space leads to gravitational attraction, and the expansion of bodies leads to surface gravity. Thus, dynamics in the fourth spatial dimension provide an alternative explanation to gravity.

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