

# 00 Vorspann

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6, November-December 2025 1 Dynamic Vacuum Field Theory Satish B. Thorwe  
MSc, Robert Gordon University, Aberdeen UK, 12 Friarsfield Avenue, Cults, Aber-  
deen AP159PP Abstract This paper presents a unified theoretical model in which  
spacetime curvature arises from distortions in a dynamic vacuum field described by a  
complex scalar  $\phi = \rho e^{i\theta}$  where  $\rho$  is dynamic vacuum field,  $\rho$  is vacuum amplitude and  
 $\theta(x)$  is vacuum phase. The vacuum possesses an intrinsic field with its phase evolves linearly with time and m  
General Relativity, which describes gravitation as spacetime geometry, and Quantum Field Theory, which  
 $\rho$  and  $\theta(x)$ , where  $\rho$  represents the vacuum amplitude (inertial density) and  $\theta(x)$  represents the vacuum phase. Phy  
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December 2025 2 spatial and temporal variations of these quantities. Within this framework, gravity is not  
order or topologically constrained phase excitations. Time itself is interpreted as the rate of vacuum phase ev  
scale correlations without invoking inflation or dark energy. At galactic scales, it reproduces MOND –  
like behavior and the baryonic Tully–Fisher relation without dark matter. At quantum scales, it frames w