

Abstract Submitted
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On the Fluid Dynamics Nature of General Relativity and Estakhr's Fluid Field Geodesic Equation AHMAD REZA ESTAKHR, Researcher — EFFG (Estakhr's Fluid Field Geodesic) Equation is developed analogy of Einstein's Field Equation and EMG (Estakhr Material-Geodesic) Equation (Which is developed analogy of Navier-Stokes Equations and Einstein Geodesic Equation ref:1) by EMG equation $\frac{DJ^\mu}{D\tau} = J_\nu \Omega^{\mu\nu} + \partial_\nu T^{\mu\nu} + \Gamma_{\alpha\beta}^\mu J^\alpha U^\beta$ we can find EFFG equation $\frac{DJ^\mu}{D\tau} = J_\nu \Omega^{\mu\nu} + \frac{c^4}{8\pi G} \partial_\nu (R^{\mu\nu} - \frac{1}{2} g^{\mu\nu} R + g^{\mu\nu} \Lambda) + \Gamma_{\alpha\beta}^\mu J^\alpha U^\beta = 0$ Where $R^{\mu\nu}$ is Ricci Curvature tensor, R the scalar Curvature, $g^{\mu\nu}$ the metric tensor, Λ is cosmological constant, G is gravitational constant, c the speed of light in vacuum, $T^{\mu\nu}$ the Stress-Energy tensor, J^μ is four-current mass density, $J_\nu \Omega^{\mu\nu}$ is Material derivative, U^μ four-velocity field and $\Gamma_{\alpha\beta}^\mu$ is Christoffel symbol. ref 1: <http://meeting.aps.org/Meeting/DFD13/Session/R8.4>

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