

# Quaternion Gravi-Electromagnetism

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Defining the generalized charge, potential, current and generalized fields as complex quantities where real and imaginary parts represent gravitation and electromagnetism respectively, corresponding field equation, equation of motion and other quantum equations are derived in manifestly covariant manner. It has been shown that the field equations are invariant under Lorentz as well as duality transformations. It has been shown that the quaternionic formulation presented here remains invariant under quaternion transformations.

Comments: Key Words: Quaternion, dyons, gravito-dyons, gravi-electromagnetism. PACS No.: 04.90.+e ; 14.80.Hv

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