



## Unification of Gravity and Electromagnetism

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### Abstract:

Gravity and electromagnetism are two sides of the same coin, which is the clue of this unification. Gravity and electromagnetism are represented by two mathematical structures, symmetric and antisymmetric respectively. Einstein's gravitational field equation is the symmetric mathematical structure. Electrodynamics Lagrangian has three parts, for electromagnetic field, Dirac field and interaction term. The definition of canonical energy momentum tensor was used for each term in Electrodynamics Lagrangian to construct the antisymmetric mathematical structure. Symmetric and antisymmetric gravitational field.

### Biography:

Mohammed A. El-Lakany is a researcher who took B.Sc. in Special Physics, Faculty of Science, Tanta University, 2004. Diploma in Radiation Physics, Faculty of Science, Ain Shams University, 2006. Preliminary M.Sc. in Theoretical Physics, Faculty of Science, Cairo University 2009. I have many publications by conferences and journals, and I am a reviewer for many journals.



### Recent Publications:

1. El-Lakany, M. A. 2017. "Unification of Gravity and Electromagnetism" *Journal of Physical Science and Application*.