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## **Unification of gravity and electromagnetism**

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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 gravitational field equation is the symmetric mathematical structure. Electrodynamics Lagrangian is 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 equations are two sides of the same Lagrangian.

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