

Non-Abelian Asymmetry

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Given a symmetry: before looking for its possible extensions one should first search for its corresponding asymmetry. This means to find out the opportunities that such symmetry offers. Then our effort here is to study an asymmetry possibility by introducing different potential fields rotating under a same single group.

In this work asymmetric classical properties are studied for the non-abelian case. The presence of asymmetry is first derived through new strength field tensors and collective aspects. Then field equations, Bianchi identities, Noether theorem and conserved currents are obtained.

Diversity and connectivity are the main results from asymmetry. Diversity can be seen through the various quanta carrying different masses, spin and coupling constants obtained through equations of motion and their corresponding conserved currents. Connectivity through new inductive relationships derived from new Bianchi identities and coupled equations. It is a gauge theory that emphasizes the meaning of entanglement.

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