Abstract

We generalize the Dirac equation incorporating the Z3-symmetry realized by complex third root of unity. The generalized spinors have 12 components, due to Z2xZ2xZ3 symmetry: half integer spin, charge conjugation and the colors. The solutions cannot propagate freely, but their cubic combination, corresponding to colorless states, can represent free particles. The relativistic invariance based on non-standard representations of the Lorentz group will be presented and discussed.