ABSTRACT

ON AN AUTOMORPHISM OF CLIFFORD ALGEBRAS IN RIEMANNIAN GEOMETRY

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Gauge theories are, usually, constructed in terms of the group of transformations, or yet the group of automorphisms, that leave the theory invariant. So far as we know, there is no gauge theory whose structure of invariance relies upon its algebra automorphisms. In an unexpected way, Clifford algebras associated to Riemannian manifolds seem to shift the standard construction of gauge theories. The aim of the talk is to discuss how this can be done via Lie derivations of the Clifford algebra that preserves the metricity condition of Riemannian geometry.