Review of: "The Standard Model Symmetry and Qubit Entanglement"

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The paper is well written with an interesting review in the introduction. It intend to generalize the original Kaluza-Klein idea with a more abstract approach capable to include a wider set of symmetries associated with the current structure of the standard model. The discussion is mainly focused on representations of the D-dimensional Lorentz group acting in states associated with qbits or even in two qbits states. In order to describe these representations for some specific D, complex numbers, quaternions and octonions were considered.

According to section III, A and B, the dimensional reduction process generates the gauge groups as residual symmetries originated by the higher dimensional space-time ones. The concept of entanglement is interestingly linked to this last point. One query/observation is that in C, the SU(2) group is said to be isomorphic to SO(3), but one should also consider the quotient operation with Z_2.

In conclusion, I believe that it is important to clearly distinguish which are the original achievements and which are the previously derived results that are being mentioned in the discussions. In order to have a more complete discussion, it'd be important to also define the limitations of the procedure described in the paper. It can be a point of departure for new perspectives on the field.