

Abstract Submitted
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Higgs-like interactions in the finitary 4-vertex representation

WAYNE R. LUNDBERG¹, None — Higgs boson was formulated using Feynman graphs which require infinitesimal 3-vertices and thus intermediating bosons for all interactions. However, many years of research on finite QC/ED representation theories, such as string theory, are also mathematically well-founded. Although string theory has been shown to lack a low-energy state algebra equivalent to QC/ED, it has yielded useful insights. Particularly, Kaku (PRD June 1990) concluded the Shapiro-Virasoro model requires a tetrahedral graph. This finitary 4-vertex representation geometry fulfills the requirement of Higgs interactions. It is also an extremely rare and relatively high-energy state of a triangulated quantum representation theory (Lundberg, proc DPF 1992). This leads to the hypothesis that a finitary 4-vertex interaction will have a much broader signature in LHC collider energy-space than expected for any boson. The preliminary results of the ATLAS collaboration (Dec 2011) produce just such a signature, with interaction energies between 124-129 GeV.

¹...additional detailed explanation of related areas via poster

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None

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