Abstract Submitted for the OSS13 Meeting of The American Physical Society

Quantum Topology of Particles having Exactly Three Generations WAYNE LUNDBERG¹, None — Discovery of a Higgs-like boson with a mass of 126 GeV has severely constrained theories of higher-generation and supersymmetric particles. It is natural, then, to examine theories which yield exactly the Standard color and charge quanta, and in three generations. The topology of tripartite particles (those have internal geometry with three-way symmetry), allow exactly three quantum generations. Such a theory, in which a closed string is replaced with a band (having torsion), offers a direct explanation for oscillatory particle states. Further, a theory of finite-dimensional particles has metrics, such as area and curvature, which are identified with terms of the instanton action. Such a particle theory is fundamentally consistent with Standard cosmology and compels a new line of research in the effort to explain dark matter.

¹Architect of Comprehensive Theory

Wayne Lundberg None

Date submitted: 24 Feb 2013

Electronic form version 1.4