LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS (LEPP)

Theory Seminar

Anson Hook U of Maryland

Solving the Hierarchy Problem Discretely



We present a new solution to the Hierarchy Problem utilizing non-linearly realized discrete symmetries. The cancelations occur due to a discrete symmetry that is realized as a shift symmetry on the scalar and as an exchange symmetry on the particles with which the scalar interacts. We show how this mechanism can be used to solve the Little Hierarchy Problem as well as give rise to light axions.

Wednesday, March 28, 2018
2:00pm
401 Physical Sciences Building