

LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS (LEPP) Theory Seminar



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## Anderson localisation in theory space

I present a mechanism for generating exponential hierarchies in the couplings of a "theory space" of four dimensional field theories, which is closely analogous to the Anderson localisation of electron energy eigenstates along a one dimensional wire. After discussing the parametric size of this phenomenon, I give two toy applications to hierarchies in the Standard Model - those of small neutrino masses and hierarchical quark Yukawas.

## Wednesday, March 14, 2018 2:00pm 401 Physical Sciences Building

LEPP, the Cornell University Laboratory for Elementary-Particle Physics, and CHESS resources have merged and a new lab, (CLASSE), has formed. LEPP's primary source of support is the National Science Foundation. Visit us at www.lepp.cornell.edu