

LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS (LEPP) Theory Seminar



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F-theory and global models of high energy physics

Using F-theory, we construct globally consistent 4d three family models of particle physics including Trinification, Pati-Salam as well as the MSSM. To forbid dimension four proton decay of the MSSM we additionally engineer a matter parity. We emphasize the geometry of the construction, starting first with the appropriate torus fiber of the fourfold which we complete with sufficient base and fluxes to satisfy tadpole and quantization conditions.

Wednesday, Sept 12, 2018 2:00pm 438 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