

## A Zip-Code for Quarks Leptons and Higgs Bosons

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The location of matter fields and the pattern of gauge symmetry in extra dimensions are crucial ingredients for string model building. We analyze realistic MSSM models from the heterotic  $Z_6$  Mini-Landscape and extract those properties that are vital for their success. We find that Higgs bosons and the top quark are not localized in extra dimensions and live in the full  $D=10$  dimensional space-time. The first two families of quarks and leptons, however, live at specific fixed points in extra dimensional space and exhibit a (discrete) family symmetry. Within a newly constructed  $Z_2 \times Z_4$  orbifold framework we further elaborate on these location properties and the appearance of discrete symmetries. A similar geometrical picture emerges. This particular Zip-code for quarks, leptons and Higgs bosons seems to be of more general validity and thus a useful guideline for realistic model building in string theory.

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