

## V. Braun: "Heterotic Model Building"

*Friday, 1 August 2008 10:00 (30 minutes)*

I will survey some aspects of geometric compactifications of heterotic strings and their low-energy phenomenology. In particular, I will focus on heterotic "non-standard embeddings". First, I will try to give a brief overview over the role of vector bundles in that construction, and how they can be constructed. Using our "heterotic standard model", I will discuss how the spectrum and Yukawa textures arise.

One observation is that not all possible superpotential terms are actually present in such compactifications. For example, I will consider a particular model with one excess Higgs-Higgs conjugate pair. It turns out that flavor-changing neutral currents are greatly suppressed.

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**Track Classification:** W2