Abstract Submitted for the TSF11 Meeting of The American Physical Society

On the correlation of extra MSSM Higgs to stringent flat directions in heterotic string theory JARED GREENWALD, Baylor University — It has been proposed that the number of extra copies of MSSM Higgs, as found in heterotically derived string GUT models, may be correlated to the existence and multiplicity of all-order stringent flat directions. We consider a handful of these GUT models and show that, even with a small number of MSSM Higgs, one can find all possibilities of flatness or lack thereof. Specifically, we present three flipped SU(5) and an SO(10) model and report on their respective D and F-flatness. We will report on each of the models' observable and hidden gauge content as well. Additionally, we comment on the possible relationship between flat direction phenomenology and moduli stabilization.

> Jared Greenwald Baylor University

Date submitted: 09 Sep 2011

Electronic form version 1.4