

## Abstract

We construct a minimal example of a supersymmetric grand unified model in a toroidal compactification of type I string theory with magnetized D9-branes. All geometric moduli are stabilized in terms of the background internal magnetic fluxes which are of "oblique" type (mutually non-commuting). The gauge symmetry is just  $SU(5)$  and the gauge non-singlet chiral spectrum contains only three families of quarks and leptons transforming in the  $10 + \bar{5}$  representations.