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Modular Flavour Symmetries in magnetized toroidal orbifolds

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The major problems in particle physics is the origin of the flavour structure of the quarks, leptons and the generation number, mass hierarchy and mixing angles. One of the candidates for the origin of flavour structure may be in higher dimensional theories such as superstrings; certain compactifications of superstrings, lead to non-abelian discrete flavour symmetries. In this contribution, we consider the 6-D supersymmetric gauge theory compactified on torus orbifold T^2/Z_2 with non-trivial magnetic flux to investigate flavour modular symmetry. The example of flavour symmetry S_4 is given. Other aspects are also described.

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