

1111-81-220

**Sergei Alexandrov\*** ([salexand@univ-montp2.fr](mailto:salexand@univ-montp2.fr)), L2C, Département Physique Théorique, Université Montpellier 2, Place Eugène Bataillon - CC070, 34095 Montpellier, France. *Symmetries of string compactifications and generalization of Freed-Witten anomaly.*

I consider the problem of consistent implementation of symmetries at the non-perturbative level in type II string theory compactified on a Calabi-Yau threefold. After inclusion of all quantum corrections, all continuous isometries of the classical moduli space are broken to discrete subgroups. I show that the naive choice of these subgroups does not generate a consistent group action, which however can be achieved by taking into account various subtle contributions determined by topological data on the Calabi-Yau. In particular, the monodromy transformations of the RR-fields should acquire anomalous terms, which seem to have a similar origin as the Freed-Witten anomaly for open strings ending on D-branes. (Received February 03, 2015)