

Majorana neutrino masses by D-brane instanton effects and Modular transformations

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In the Standard Model, we cannot obtain the mechanism how to derive the left-handed neutrino masses. Our strategy to solve it is to exploit the Seesaw Mechanism. To get the right-handed Majorana neutrino masses for the Seesaw Mechanism, we utilized and studied the D-brane instanton effect with magnetized orbifold models on torus. Many models can be constructed by changing the magnetic fluxes. We listed up all models consistent with the Standard Model and pointed out that our calculations are consistent with the Modular transformation on the torus.

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