

”Modular maps” and BSM phenomenology

Friday, 16 July 2021 12:00 (30 minutes)

In the context of the free fermionic construction I define “Modular maps” as maps induced by groups of 4 periodic fermions that map between different sectors within vacua, or between different vacua. I will discuss three examples of such maps:

1. S-map and spacetime supersymmetry;
 2. α -map, spinor-vector duality and light Z' phenomenology. Spinor-vector duality as a tool to explore the moduli spaces of (2,0) string compactifications will also be discussed.
 3. \tilde{S} -map and non-tachyonic string vacua from tachyonic 10D vacua.
- “modular maps” are ubiquitous in compactifications to 2 dimensions reflecting the large symmetry space of 24 dimensional lattices. Initial steps to explore this symmetry structure will be discussed.

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