

Topology Invariants (schematic)

Chern classes: $c_1(V)=0$, $c_2(V)$, $c_3(V)$

Pontryagin class: $p_1(M) = -1/2 \text{Tr}(R \wedge R)$

Euler characteristic: $\chi(M) = \sum (-1)^i b_i$

Net generations: $N_{\text{gen}} = 1/2 \int c_3(V)$