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Title: Invariant versus generic

Abstract:

The Euler characteristic is a classical invariant for topological manifolds. On complex manifolds, one can obtain from it some information about the Hodge numbers, that is, about the dimensions of spaces of harmonic differential forms, which in turn can be interpreted as invariants that 'count' so-called BPS-states in an associated quantum field theory. By generalizing this, we shall discuss an invariant that 'counts' so-called generic quarter BPS-states on K3 surfaces.