

## Computation of the index on orbifold

*Tuesday 8 July 2025 14:42 (17 minutes)*

We investigate the independent chiral zero modes on the orbifolds from the Atiyah-Segal- Singer fixed point theorem. The required information for this calculation includes the fixed points of the orbifold and the manner in which the spatial symmetries act on these points, unlike previous studies that necessitated the calculation of zero modes. Since the fixed point theorem can be applied to any fermionic theory on any orbifold, it allows us to determine the index even on orbifolds where the calculation of zero modes is challenging or in the presence of non-trivial gauge configurations.

**Presenter:** TAKEUCHI, Maki

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