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Title: Localisation theorems in equivariant cohomology

Abstract:

Equivariant homotopy theory studies the interplay between spaces and their symmetries. The subject arose from techniques developed to solve deep geometrical problems, and has seen many applications in physics. One of the early successes in this area is Atiyah-Bott's localisation theorem. Roughly speaking, this says that the equivariant cohomology of a space with a group action is largely determined by the equivariant cohomology of its fixed points. I will give an introduction to equivariant homotopy theory via Atiyah-Bott's theorem and will show how to generalise their theorem.