EQUIVARIANT BORDISM

IZAK GRGURIC
UBC

How can we detect if an equivariant manifold is a boundary? In the non-equivariant case, we know that the vanishing of (certain) characteristic numbers is necessary and sufficient. This result is usually proved by constructing the representing spectrum of the given bordism theory, then utilizing the machinery of stable homotopy. In the equivariant case, this link between geometry and homotopy is not always that strong (it depends on the group G) - one needs to work harder to boil the geometry down to computable algebra. In this talk I will introduce some of the geometric constructions that we have at our disposal for answering the above question.