INTRO TO EQUIVARIANT GRASSMANNIANS

Topological spaces can be thought of as shapes that organize some kind of information. For example, the Grassmannian manifolds are a family of spaces which index hyperplanes (lines, planes, three dimensional subspaces, and beyond). My research explores what happens when spaces like these are allowed to move around (more formally, when they are equipped with a group action). I will give some small examples, and then discuss how we can still tackle these objects when they grow too large for our geometric intuition.