IZAK GRUGRIC, UBC, Department of Mathematics, Room 121, 1984 Mathematics Road Vancouver, BC, Canada V6T 1Z2 *Equivariant geometric bordism*

How can we detect if an equivariant manifold is an equivariant boundary? Depending on the group G acting, turning the geometry of this problem into calculable homotopy, might not be as easy as in the non-equivariant case (if possible at all). However, as a direct consequence of this, one gets that the equivariant bordism rings posses a much richer structure than their classical counterparts. In this talk I will discuss some of the methods that we have at our disposal for answering the above question, as well as some of the geometric ideas that stem from this problem. I would also like to present a few applications.