## 1158-20-294 James Cunningham Cameron\* (jcameron@math.ucla.edu). Stratification for cochain algebras on Borel constructions of G-spaces. Preliminary report.

For G a compact Lie group and X a finite G-CW complex I will discuss how the Borel equivariant cohomology ring of X with  $\mathbb{F}_p$  coefficients controls the structure of the derived category of the cochain algebra of the Borel construction. on X.

I will also indicate how generalizing from finite groups to compact Lie groups and G-spaces allows one to study some of the categories that appear in modular representation theory via categories that have structure that doesn't appear at the purely algebraic level. (Received March 03, 2020)