Derived Mackey functors

IRAKLI PATCHKORIA

University of Aberdeen, United Kingdom.
E-mail address: `irakli.patchkoria@abdn.ac.uk`
URL: `http://www.abdn.ac.uk/people/irakli.patchkoria/`

In this talk I will give an overview of derived Mackey functors and summarise different approaches developed by various authors. Motivated by calculations in topological cyclic homology, derived Mackey functors were introduced by Kaledin as an alternative to the classical Mackey functors which is better behaved with respect to the geometric fixed points. We will describe Kaledin's approach and compare it to spectral Mackey functors of Barwick. We will also explain how derived Mackey functors are equivalent to modules over certain equivariant ring spectrum. This is a part of a recent joint work with Sanders and Wimmer. At the end I will mention some applications and results about derived Mackey functors due to various authors.