

1133-20-373

Bahran Cihan* (bahra004@umn.edu), Minneapolis, MN 55403. *Categorifications of induction theorems in finite group representation theory*. Preliminary report.

Artin's induction theorem states that every complex character of a finite group G can be written as a rational linear combination of characters induced from cyclic subgroups. We give a categorification of this theorem and several generalizations of it via a well-studied infinite dimensional G -space. The fact that the space is infinite-dimensional means that the usual notion of Euler characteristic is not defined, but we see that by a certain way of summing a divergent series, the correct rational coefficients arise. (Received August 02, 2017)