ALGEBRA SEMINAR

Simple section biset functors

By

Ruslan Muslumov
(ADA University)

Abstract: For a commutative and unitary ring k, a biset functor over k is a k-linear functor on the biset category, whose objects are finite groups and whose morphism sets are given by the Grothendieck groups B(G,H) of finite (G,H)-bisets. The remarkable results as the evaluation of the Dade group of endopermutation modules of a p-group and finding the unit group of the Burnside ring of a p-group are done using the theory of biset functors. Looking for ring objects in the category of biset functors one gets a more sophisticated structure which is called a Green biset functor. Serge Bouc introduced the slice Burnside ring and the section Burnside ring for a finite group G. He also showed that these two rings have a natural structure of a Green biset functor. In our work we classified simple modules over the section Burnside ring of G using the approach of the fibered biset functors article by Robert Boltje and Olcay Coşkun.

Date: Wednesday, November 2, 2022
Time: 11:00 – 12:00 (UTC+3)
Place: ZOOM. This is an online seminar. To request the event link, please send a message to d.yilmaz@bilkent.edu.tr