

ALGEBRA SEMINARS

Generalized tensor induction associated to monomial bisets

By

Hatice Mutlu

Abstract: Let G and H be finite groups and C be an abelian group. This week, we will construct generalize tensor induction functors associated to any C-monomial (G,H)-biset from the category of C-monomial G-posets to the category of C-monomial H-posets. We will show that these functors induce well defined tensor induction maps from B(C,G) to B(C,H), which are not additive in general, but multiplicative and preserve identity elements. Moreover, under an additional assumption, these tensor induction functors and their associated tensor induction maps are well behaved for composition. This yields to a (partial) fibered biset functor structure on the group of units of the monomial Burnside ring. This is a joint work with Serge Bouc.

Date: October 15, 2018 <u>Time:</u> 10:40 – 11:50 <u>Place:</u> SA141 Mathematics Seminar Room

* Tea and cookies will be served before the talk. All are most cordially invited.