

Algebra Session - Monday, September 19, 2022

9:00

Carmelo Finocchiaro, University of Catania

Prime ideals in products of commutative rings

10:00

Francesca Fedele, University of Padova

Universal localizations of d-homological pairs

11:00-11:30 coffee break

11:30

Francesco Sentieri, University of Verona

Alpine meditations on monobricks

12:30 – 15:30 lunch break

15:30-18:00 discussion

Abstracts

Carmelo Finocchiaro, University of Catania

Prime ideals in products of commutative rings

Abstract. Let R be the direct product of a nonempty collection of commutative rings. We will describe certain types of prime ideals of R . Moreover, in case every ring in the collection is a Prüfer domain we will describe all the prime spectrum. This talk is based on a paper jointly written with S. Frisch and D. Windisch.

Francesca Fedele, University of Padova

Universal localizations of d-homological pairs

Abstract: Let k be an algebraically closed field and A a finite dimensional k -algebra. The universal localization of A with respect to a set of morphisms between finitely generated projective A -modules always exists. When A is hereditary, Krause and Stovicek proved that the universal localizations of A are in bijection with various natural structures. In this talk I will introduce the higher analogue of universal localizations, that is universal localizations of d-homological pairs with respect to certain wide subcategories, and show a (partial) generalisation of Krause and Stovicek result in the higher setup.

Francesco Sentieri, University of Verona

Alpine meditations on monobricks

Abstract : Enomoto introduced monobricks (collection of bricks with only monomorphisms between them) to obtain a complete description of torsionfree classes in abelian length categories.

After recalling the basic facts from Enomoto's work, we show that in the context of module categories the theory of torsionfree, almost torsion modules completes in a nice way the theory of monobricks.