- **Antonio Díaz Ramos:** *The Burnside ring of fusion systems.*

  In this talk I will describe the Burnside ring of saturated fusion systems. This ring is modeled on the Burnside ring of finite groups and, after p-localization, it has good algebraic properties. For fusion systems induced by finite groups there is a close relationship between the Burnside ring of the group and the Burnside ring of the fusion system. I will also discuss Mackey functors on the orbit categories of fusion systems. This is joint work with Assaf Libman.

- **Jesper Grodal :** *Equivariant self-maps of spheres and Burnside rings.*

  I will describe the (Borel) G-equivariant self-maps of spheres, for G a finite group, in terms of certain p-local generalized Burnside rings. Joint work with Jeff Smith.

- **Radha Kessar :** *Algebras of saturated type.*

  I will present a sufficient condition for a finite dimensional p-permutation G-algebra (G a finite group) to give rise to a saturated fusion system-algebras satisfying this condition are said to be of saturated type. The "classical" examples of saturated type algebras are block algebras; I will give some non-classical examples and pose some questions.

- **Ran Levi :** *Unstable Adams Operations for p-local compact groups.*

  This is a preliminary report on a joint project with Castallana, Junod and Libman, based on Junod's PhD thesis. The aim is to generalize the useful concept of an unstable Adams operation on the classifying space of a compact Lie group or a p-compact group to p-local compact group. Classically these are defined as selfmaps of a p-completed classifying space, which restricted to the maximal torus are the q-th power map, where q is a power of some prime different from p. We will define the appropriate concepts in our context and show that under certain restrictions such self maps exist for all p-local compact groups. Certain implications will also be discussed.

- **Nadia Mazza :** *p-groups with maximal elementary abelian subgroups of rank 2. (joint with George Glauberman).*

  Let p be an odd prime number and G a finite p-group. In this talk, we will prove that if the rank of G is greater than p, then G has no maximal elementary abelian subgroup of rank 2. It follows that if G has rank greater than p, then the poset $E(G)$ of elementary abelian subgroups of G of rank at least 2 is connected and the torsion-free

rank of the group of endotrivial kG-modules is one, for any field k of characteristic p. Time permitting, we will also discuss the class-breadth conjecture for the p-groups G whose poset $E(G)$ has more than one component.

- **Bob Oliver :** *Reduced fusion systems over 2-groups.*

- **Sejong Park :** *Two applications of bisets and idempotents for fusion systems.*

  Using characteristic bisets and characteristic idempotents of (saturated) fusion systems, we (1) generalize classical transfer theorems of Yoshida and Tate to arbitrary fusion systems, and (2) show that every fusion system can be realized as a full subcategory of the fusion system of a finite group and analyze some of those finite groups for Ruiz-Viruel exotic fusion systems. This is an update from our talk at the Skye conference this year. Part (1) is a joint work with Antonio Díaz, Adam Glesser, and Radu Stancu; part (2) is a joint work with Justin Lynd and Ron Solomon.

- **Radu Stancu :** *Encoding Fusion Data in the Double Burnside Ring.*

  To a saturated fusion system Carles Broto, Ran Levi and Bob Oliver associate a characteristic biset. Moreover, Kari Ragnarson proves that any characteristic biset of a given saturated fusion system gives rise to a unique characteristic idempotent in the double Burnside ring. In this talk I will present a joint work with Kari Ragnarsson that gives a new way to look at fusion systems, via the double Burnside ring. More precisely, every fusion system can reconstructed from its characteristic idempotent in the double Burnside ring. Furthermore, characteristic idempotents are exactly those that satisfy a certain Frobenius reciprocity relation. Thus, one obtains a bijection between fusion systems and idempotents satisfying Frobenius reciprocity.

- **Peter Symonds :** *Fusion Systems for Profinite Groups (Joint work with Radu Stancu).*

  Since profinite groups have a good Sylow theory it is natural to consider fusion in them. We show how to define a fusion system on a pro-p group and develop some of its properties.