Talk Title: Fusion systems, counting conjectures, p-compact groups and finite groups of Lie type.

Abstract: To every block of a modular finite group algebra is associated a saturated fusion system which controls the representation theory of the block. On the other hand, there are saturated fusion systems which are not associated to any block. In my talk, I will discuss the following question: Are there structures associated to arbitrary saturated fusion systems which play the role of blocks? This question is vague and we are far from answers but I will describe some attempts in this direction.