Topology Seminar

Kari Ragnarsson

of DePaul University will be speaking on

Fusion in the Burnside ring

on December 9 at 4:30 in MIT Room 2-131

In this talk I will present recent work, joint with Radu Stancu, in which we obtain a bijection between saturated fusion systems on a finite p-group S and idempotents in the double Burnside ring of S satisfying a "Frobenius reciprocity relation". (These terms will all be defined in the talk.) The theorem and its proof are purely algebraic, so I will focus attention on implications in algebraic topology, answering long-standing questions on the stable splitting of classifying space and generalizing a variant of the Adams-Wilderson theorem, as well as the obvious implications for *p*-local finite groups.