

## BRAUER-SEVERI SCHEMES OF AZUMAYA ALGEBRAS

## AND NILPOTENT FUSION RULES

## Speaker: Frederik Caenepeel Shanghai Center for Mathematical Sciences

Time: Wed., Nov. 11th, 14:30-15:00 Venue: Room 102, SCMS

## **Abstract:**

In my final defense I will explain the two projects I have been working on the past year. The first project is a continuation of glider Brauer-Severi varieties of filtered central simple algebras but now for Azumaya algebras. Before we could tackle the glider case, however, we have to reintroduce the notion of Brauer-Severi scheme for an Azumaya algebra. This is joint work with Fred Van Oystaeyen. The second project arose out of my collaboration with Geoffrey Janssens on the glider representation ring of a finite group. We discovered the fusion rules in the representation ring of a finite nilpotent group and many of its features are translatable in the more general setting of fusion categories.