



ID de Contribution: 3

Type: **Exposé de recherche sur invitation**

Gröbner methods for generic representation theory and the artinian conjecture

mercredi 22 octobre 2014 14:20 (50 minutes)

Let k be a finite field, let $V(k)$ be the category of finite-dimensional vector spaces over k , and let $F(k)$ be the category of endofunctors of $V(k)$. $F(k)$ is closely related to the category of unstable modules over the Steenrod algebra. A dual version of Schwartz's artinian conjecture states that every finitely generated object in $F(k)$ is noetherian, i.e., satisfies the ascending chain condition for subobjects. I will present the ideas of a proof of a more general version of this conjecture based on Gröbner methods for functor categories developed jointly with Andrew Snowden. Time permitting, I will explain how some related categories are useful for the study of homology of congruence subgroups of automorphism groups of free groups and mapping class groups of surfaces (joint with Andrew Putman).

Mots Clés / Keywords

functor categories, artinian conjecture

Auteur principal: Dr SAM, Steven (University of California, Berkeley)

Co-auteurs: Prof. PUTMAN, Andrew (Rice University); Prof. SNOWDEN, Andrew (University of Michigan)

Orateur: Dr SAM, Steven (University of California, Berkeley)

Classification de thématique: TopAlg