Séminaire d'algèbre, géométrie et topologie
Jeudi 5 mars à 14h
Salle I

Donu Arapura

IHES

Toward the structure of large Kahler groups

A group is sometimes called large if it surjects onto a nonabelian free group. A strong restriction on large Kahler groups is provided by the Beauville-Siu theorem, which implies that such a group must in fact surject onto the fundamental group of a compact Riemann surface. By looking at how the surface group acts on the kernel of this surjection, we get a much stronger constraint. The key point is that this representation is Hodge theoretic in nature, as I will explain.