

# Workshop on Right-Angled Artin Groups and their Automorphisms

Orsay, 2–4 May 2018

## Schedule

	Wednesday		Thursday	Friday
9h - 10h30	Minicourse 1		Minicourse 3	Minicourse 4
11h - 12h	Genevois		Coulon	Gupta
14h - 15h30	Minicourse 2	14h - 15h	Wade	

## Minicourse

**Ruth Charney and Karen Vogtmann:** "Automorphism groups of right-angled Artin groups"

## Talks

**Rémi Coulon:** A Cartan-Hadamard like theorem for relatively hyperbolic groups.

Abstract: It is known that the asymptotic cone of any relative hyperbolic groups has a tree like structure. However this property is not sufficient to characterize relative hyperbolic group. In this talk I will explain that if  $G$  is a *finitely presented* group one of whose asymptotic cone is a tree-graded space (with a specific control on the pieces) then  $G$  is actually relative hyperbolic.

**Anthony Genevois:** "On the acylindrical hyperbolicity of automorphism groups of RAAGs"

Abstract: The talk will be dedicated to the following question: when is the automorphism group of a RAAG acylindrically hyperbolic? Focusing on a specific family of RAAGs, I will explain how to answer this question.

**Radhika Gupta:** "Homotopy type of the complex of free factor systems for a free group"

Abstract: I will define the complex of free factor systems for a free group

and show that it is homotopy equivalent to a wedge of spheres. We will also see how this complex is related to the unreduced outer space for a free group.

**Ric Wade:** "Relative automorphisms of right-angled Artin groups"

Abstract: We look at the group of outer automorphisms of a right-angled Artin group preserving a set of special subgroups (i.e. subgroups coming from subgraphs of the defining graph). I will give some examples to show how these groups arise naturally in the study of the whole automorphism group, and sketch how such groups are finitely generated. This is joint work with Matthew B Day.