“Group Theory International”
Online Seminar

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“Free affine actions on linear Λ-trees"

Thursday, Oct 11, noon (New York Time)

Abstract:

Isometric actions on Λ-trees (where Λ is an ordered abelian group) have been studied over the last three decades, particularly in the case Λ = R. There has also been much recent activity in the non-archimedean case. Affine actions on R-trees were introduced by I. Liousse who gave interesting examples of groups admitting free affine actions but which admit no free isometric action on an R-tree. In recent work, we have extended the concept of affine actions to Λ-trees, and have developed a theory analogous to that of isometric actions on Λ-trees.

In this talk we will focus on free affine actions on Λ itself viewed as a Λ-tree. While this case is trivial in the isometric case and in the affine archimedean case, we will see that a much richer class of groups results when one considers free affine actions on Λ when Λ is not archimedean.

Next presentation: **Oct 25**, Martin Bridson *(University of Oxford, UK)*

Algebraic Cryptography Center