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Representation and Number Theory Seminar

Representations of Hecke algebras and Weyl groups

by

Professor Maarten Solleveld
Radboud Universiteit

Abstract:

Affine Hecke algebras are the key to many problems in the representation theory of reductive groups. Every affine Hecke algebra $H(W, q)$ admits an explicit presentation as a deformation of the group algebra of an affine Weyl group W. That allows one to study them independently, without reductive groups.

In this talk we will compare the representations of affine Hecke algebras, of finite Weyl groups and of affine Weyl groups. Although $H(W, q)$ is much more complicated than the group algebra of W (over C), we will show that there exists a canonical bijection between the sets of irreducible representations of these two algebras. We will also discuss the relation with Springer correspondences for affine Weyl groups.

Date : April 20, 2021 (Tuesday)
Time : 4:30pm – 5:30pm (Hong Kong SAR)
Zoom link :
https://cuhk.zoom.us/j/97838822137?pwd=ZTVvSC9abmNjR3RCcS9FTzJNTVhXdz09
Meeting ID: 978 3882 2137
Passcode : sesame

All are Welcome