

# Constructing representations of braid groups à la R. Lawrence

Seminar talk at [IMAR](#) // [Martin Palmer-Anghel](#) // 4<sup>th</sup> January 2018

## **Abstract:**

The purpose of this talk will be to introduce a topological method, due to R. Lawrence, of constructing representations of braid groups. With some extra elaborations, this topological construction recovers certain irreducible representations of the (type  $A_n$ ) Iwahori-Hecke algebras and certain specialisations of the HOMFLY-PT link invariant, including the Jones polynomial. We will focus on explaining Lawrence's construction from different viewpoints, how these viewpoints are interrelated and how they are related to other constructions of braid group representations.

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