



Speaker: Matthew Dyer
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Tuesday, April 19, 2016

12:00 PM

125 Hayes-Healy Hall

Title: Twisted highest weight modules and shellability

Abstract:

This talk will survey properties and examples of a class of “assemblable” K -algebras over a commutative ring K . They are defined by recursive conditions analogous to (and closely related to in special cases) those appearing in the definition of shellable complexes and posets. Under mild general conditions, they have very favorable algebraic, combinatorial and representation theoretic properties including freeness as K -modules, recursively computable R -polynomials, natural factorizations of their Shapovalov matrices and a good theory of twisted highest weight modules.