

# DeRham cohomology of cluster algebras

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I will talk about joint work with David Speyer where we make progress towards computing the algebraic deRham cohomology of cluster varieties.

The main application in representation theory is in the case of open Richardson varieties, which are either known or conjectured to have cluster structures. The cohomology of these varieties compute higher extensions between Verma modules in category  $\mathcal{O}$ .

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