

4th ABCD-Seminar

Wednesday, July 29th, 2020, 5:00 pm

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Singularities of Schubert varieties within a right cell

We describe an algorithm which takes as input any pair of permutations and gives as output two permutations lying in the same Kazhdan-Lusztig right cell. There is an isomorphism between the Richardson varieties corresponding to the two pairs of permutations which preserves the singularity type. This fact has applications in the study of W -graphs for symmetric groups, as well as in finding examples of reducible associated varieties of \mathfrak{sl}_n -highest weight modules, and comparing various bases of irreducible representations of the symmetric group or its Hecke algebra.

This is joint work with Peter McNamara.