

VCU Discrete Mathematics Seminar

Counting factorizations in complex reflection groups

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Wednesday, Sept. 4
1:00-1:50
4145 Harris Hall



There is a robust field of study involving factorizations of permutations in the symmetric group. One of many results in this area is a formula of Jackson for the generating function that counts factorizations of an n -cycle as a product of k factors, keeping track of the number of cycles in each factor. In this talk, I'll describe joint work with Alejandro Morales on a generalization of this question: we enumerate factorizations of a Coxeter element in a well generated complex reflection group into arbitrary factors, keeping track of the fixed space dimension of each factor. In the infinite families of generalized permutations, our approach is fully combinatorial, while in the other families we use representation-theoretic techniques.

For the DM seminar schedule, see:

<http://www.people.vcu.edu/~dcranston/DM-seminar/>