ALGEBRA SEMINAR

Character polynomials for symmetric groups

By

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Abstract: For every positive integer r, the number of cycles of length r in the cycle decomposition of a permutation is a class function X_r which is simultaneously defined on every symmetric group. A polynomial in terms of X_r's is called a character polynomial. They are closely related with Church—Farb's notion of multiplicity stability (I called this Specht stability in previous talks) for a sequence of symmetric group representations with often better stable ranges in practice. In this talk I will discuss how character polynomials fit in the representation stability theory and give some examples arising in applications.

Date: Monday November 13, 2023
Time: 10:30
Place: SA141 - Mathematics Seminar Room