

METU Mathematics General Seminar

Character Polynomials for Symmetric Groups and FI-modules

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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, describing a sequence of (virtual) S_n representations for every n . In this talk I will discuss how such sequences arise in particular examples of interest and time permitting explain how the theory of FI-modules provides a general framework for their occurrence.

Date: Thursday, 12 March 2026

Time: 15:40

Place: Gündüz İkedâ Seminar Room