

Speaker: Stavros GAROUFALIDIS (Max Planck Institute for Mathematics, Germany)

Title: Patterns of the polynomial of knots

Abstract: Recently, Kashaev and the speaker defined a sequence of 2-variable knot polynomials with integer coefficients, coming from the R -matrix of a rank 2 Nichols algebra, the first polynomial been identified with the Links--Gould polynomial. In this note we present the results of the computation of the polynomials for and discover applications and emerging patterns, including unexpected Conway mutations that seem undetected by the R -polynomials as well as by Heegaard Floer Homology. Joint work with Shana Yunsheng Li.