

Plethysm and the algebra of uniform block permutations

02.05**Anne Schilling***(University of California at Davis)***Time:** Tuesday 05.07., 14:00 – 14:50

Abstract: We study the representation theory of the uniform block permutation algebra in the context of the representation theory of factorizable inverse monoids. The uniform block permutation algebra is a subalgebra of the partition algebra and is also known as the party algebra. We compute its characters and provide a Frobenius characteristic map to symmetric functions. This reveals connections of the characters of the uniform block permutation algebra and plethysms of Schur functions. This is based on joint work with Rosa Orellana, Franco Saliola and Mike Zabrocki.