1062-05-229 Emmanuel Briand (ebriand@us.es) and Rosa C Orellana* (rosa.c.orellana@dartmouth.edu), Mathematics Department, 6188 Kemeny Hall, Hanover, NH 03755, and Mercedes Rosas (mrosas@us.es). The Kronecker Product of Representations of the Symmetric Group.

The Kronecker coefficients are the multiplicities obtained when we take the tensor product of two irreducible representations of the symmetric group. In this talk we will present recent results about the Kronecker coefficients obtained by studying a related family of coefficients: the *reduced Kronecker coefficients*. The reduced Kronecker coefficients is a family of non-negative integers that until recently has been overlooked. In this talk we aim to introduce and present several results on the reduced Kronecker coefficients as well as to illustrate their applicability in the understanding of the Kronecker coefficients. In particular, we will present some results about the stability and complexity of the Kronecker coefficients.

Joint work with E. Briand and M. Rosas (Received August 09, 2010)