

**DIA C** de Combinatória

Sexta-feira, dia 8 de Abril de 2011

FCUP anfiteatro M029

**Resumos das Palestras**

16 horas **Ricardo Mamede** Universidade de Coimbra

*Skew Schur functions with interval support*

**Abstract:** It is known that the Schur expansion of a skew Schur function runs over an interval of the dominance lattice with top and bottom elements defined respectively by the least and the most dominant Littlewood-Richardson fillings of the skew shape. For any skew shape  $A$ , the support of  $A$  (or  $s_A$ ) is defined to be those partitions such that the corresponding Schur function appears with positive coefficient in the Schur expansion of  $s_A$ . We classify a class of skew shapes  $A$  whose support consists of the whole interval, and, in particular, those having Littlewood-Richardson coefficients always equal to 1 over the full interval. As a consequence the Schur function product with all Littlewood-Richardson coefficients either positive or equal to 1 are also classified. This is equivalent to the classification of skew characters of the symmetric group and to the Schubert product in the cohomology ring of the complex Grassmannian obeying the same properties.