## The 2nd Combinatorics Day

Saturday, 17th of March of 2012

DMUC, room 2.5

Abstracts

11:30-12:00 **Aram Emami** (CMUC, UC):

Semi-skyline augmented fillings and a non-symmetric Cauchy identity in type A

**Abstract:** We use semi-skyline augmented fillings (SSAF) by Haglund, Haiman and Loehr, and which Mason has used to determine the right key of a tableau, to give a combinatorial interpretation of a non-symmetric Cauchy identity in type A. This non-symmetric Cauchy kernel expands as a sum of products of two families of key polynomials, one of them being Demazure characters. A different combinatorial approach to this identity was provided by Lascoux in terms of double crystal graphs.