



Centre Interfacultaire Bernoulli (CIB)



Wednesday, May 28th, 2008 from 2 PM to 4 PM

In room AAC 006

To be followed by discussion

“Coamoebas of Discriminants and Hypergeometric Mellin-Barnes Integrals”

Avrust Tsikh

(Siberian Federal University, Russia)

Abstract :

We start by the Horn-Kapranov parametrization for the A-discriminant set (or for the discriminant set of a general polynomial transform of the complex affine space). Using this parametrization we study the argument (phase)-image of the discriminant set, which is called coamoeba of this set. Then we describe the relation between the coamoeba and the convergence domain of the hypergeometric Mellin-Barnes integral representing solutions to A-hypergeometric differential equations.

The presenting results were obtained together with L.Nilsson and M.Passare.

Lausanne, May 16th, 2008

TR/tvw