Faculty Colloquium

Date : Friday, October 15, 2010

Speaker: Gérard Létac, Université Paul Sabatier, Toulouse, France

Title: **The Thomae formula and the hypergeometric densities of random continued fractions**

Abstract

The Thomae formula for hypergeometric functions discovered in 1879,

$$T(A,B,C,D,E) = \frac{\Gamma(C)\, {}_3F_2(A,B,C,D,E;1)}{\Gamma(D)\,\Gamma(E)},$$

has the invariance property

$$T(A,B,C,D,E) = T(D-C, E-C, D+E-A-B-C, D+E-A-C, D+E-B-C).$$

We prove it and on applying it discover the distributions of some nice random continued fractions.