



ΠΡΟΣΚΛΗΣΗ ΣΕ ΔΙΑΛΕΞΗ

Την Τρίτη 05/05/2015 στις 12:15 θα πραγματοποιηθεί διάλεξη στην Αίθουσα 335, στον 3^ο όροφο του Κεντρικού Κτηρίου του Πανεπιστημίου Πειραιώς, με ομιλητή τον Καθηγητή Claude Lefèvre, Université Libre de Bruxelles, Belgium, με θέμα:

“Polynomials, order statistics and risk models in Insurance and Epidemics”

Abstract

Our main purpose is to construct a bridge between two classical topics in applied probability: the finite-time ruin probability in insurance and the final outcome distribution in epidemics. We start by reformulating these two problems in terms of the joint right-tail and left-tail distributions of order statistics for a sample of uniforms. Thanks to this representation, we are then able to show that the hidden algebraic structures are of polynomial type, namely Appell in insurance and Abel-Gontcharoff in epidemics. These polynomials are defined with randomized parameters, which makes their mathematical study interesting in itself. We close by discussing briefly a multivariate extension of this work to a multirisk insurance model and a multigroup epidemic model.