

UNIVERSITY OF DELAWARE
DEPARTMENT OF MATHEMATICAL SCIENCES
DISCRETE MATHEMATICS SEMINAR

Friday Feb. 22, 2002, 3:30pm, Room 436 Ewing Hall

Diversity of a Sample of i.i.d. Geometric Random Variables

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I will discuss the limiting distribution of the number of distinct values in a sample of i.i.d. geometrically distributed random variables. This work was motivated by a similar question (i.e the number of distinct parts) in integer compositions. The main tool used in a proof is "analytical depoissonization" introduced a few years ago by Jacquet and Szpankowski as a method for average case analysis of certain (for example leader election) algorithms. This is based on a joint work with Guy Louchard from Universite Libre (Bruxelles).