

Geometric Pólya-Aeppli process

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Abstract

In this talk we introduce a new point process called Geometric Pólya-Aeppli process (GPAP), with underlying exponential distribution. We provide the system of differential equations for the distribution of the number of events of the GPAP up to time t and discuss some of its properties. The new process is an extension of the well known Pólya-Aeppli process, as well as the standard geometric process with underlying exponential distribution. The talk is in collaboration with Stefanka Chukova.