Stochastic comparisons and ageing properties of Polya processes

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SUMMARY

In this work we consider the generalized Polya process with intensity function r and parameters α and β recently studied in [2]). The aim of this work is to provide stochastic comparisons between to generalized Polya processes with different intensity functions and the same parameters α and β for the epoch times and inter epoch times of the two processes. The comparisons are analogous to stochastic comparisons in [1] for two nonhomogeneous Poisson processes with different intensity functions. Moreover we study ageing properties of the epoch an inter epoch times of the generalized Polya process.

Keywords: Polya process, stochastic comparison, ageing properties

AMS Classification: 60E15, 60G99

References

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