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RUIN PROBABILITIES IN THE TWO-DIMENSIONAL COMPOUND POISSON RISK MODEL

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Abstract

In this paper, we discuss the two-dimensional compound Poisson risk model. We set this model into the framework of PDMP and get an exponential martingale by virtue of the extended generator of the PDMP. The technique of change of measures is developed and the expressions of ruin probabilities are derived.

Key Words : *Two-dimensional compound Poisson risk model, Martingale approach, Change of measure, Ruin probabilities.*

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