

## 带多阈值的两类索赔风险模型中的期望折现罚函数

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## The Expected Discounted Penalty Function for a Risk Model with Two Classes of Claims under Multiple Thresholds

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**摘要** 本文考虑了带多阈值两类索赔到达风险模型, 在假定两类索赔到达过程均为phase-type分布时, 建立了期望折现罚函数所满足的积分-微分方程. 并通过拉普拉斯变换讨论了方程的解.

**关键词:** 两类风险过程 Gerber-Shiu函数 多层阈值 Phase-type分布

**Abstract:** In this paper, we consider two independent classes of risk models under multiple thresholds in which both of the two inter-claim times have phase-type distributions. We obtain the integro-differential equations with boundary conditions for the expected discounted penalty function. Last, we discuss the solutions through Laplace transforms.

**Key words:** two classes of risk processes Gerber-Shiu penalty function multiple thresholds phase-type distribution

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