

## **Quickest drift change detection in Lévy-type force of mortality model**

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In the talk I will give solution to the quickest change-point detection problem for the Lévy process consisting of both continuous and jump part. We will consider Bayesian framework with exponential a priori distribution of the change point and an optimality criterion based on probability of false alarm and expected delay of the detection. Our approach is based on optimal stopping theory and it is followed by numerical analysis. We will use this theoretical results to analyse Polish life tables and to model force of mortality in population with drift changing in time.

The talk is based on joint work with Zbigniew Palmowski.