

## **A RISK MODEL WITH REPORTING DELAYS**

**Andrei Badescu**, University of Toronto, Canada, badescu@utstat.toronto.edu

We consider an insurance risk model where the time between accidents and reporting occurrences are exponential or Erlang distributed. Furthermore, we assume that when reported, a claim is paid at instant and its size follows a phase-type distribution. By translating the newly formed point process into a particular Markovian Arrival Process (MAP) structure and by using fluid flows, we obtain several ruin related measures. Numerical illustrations are presented in the end.