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Corina D. Constantinescu* (corina@math.orst.edu), 288 Kidder Hall, Corvallis, OR 97331,
and **Enrique A. Thomann**. *Asymptotic Decay of the Ruin Probability in a Renewal Risk Process
with Uncertain Investments*. Preliminary report.

We study the asymptotic decay of the probability of ruin in a collective risk model, a classical problem in the actuarial mathematics literature. In this talk the claim arrivals process is considered to be a renewal process with the times between claims Erlang(n) distributed. The insurance company invests all the capital and the incoming premiums into a risky asset with a price which follows a geometric Brownian motion. It is shown that the probability of ruin has an algebraic decay rate, surprisingly slower than the exponential decay rate observed in the model with no investments. (Received September 26, 2006)