1014-62-226   **Marlo K Brown*** (`mbrown@niagara.edu`), 343 Dunleavy Hall, Niagara University, NY 14109.
Monitoring a Continuous Poisson Process Subject to Change.
Suppose we have a Poisson process where the arrival rate increases at some unknown time point. We would like to detect this change as soon as possible without too many false alarms. What is the probability that a change has occurred?

If there is a cost for stopping early and a cost per time unit for stopping late, how do we find an optimal stopping rule that will minimize cost? In the literature this has been done for the case where the cost is large. We would like to calculate the optimal stopping rule for the case where the cost is small. (Received August 27, 2005)