

# **A queueing system with impatient customers and random service speed**

Yun-han, Bae

*Department of Mathematics, Korea University, Seoul 136-701, KOREA*

e-mail:querquer@hanmail.net

## **ABSTRACT**

We consider single-server FIFO queueing system where a customer who cannot begin to receive his service for a fixed time is lost. Service speed of customer is governed by the underlying continuous time Markov chain with finite states.

We find a simple Markov process and then obtain the stationary distribution of the Markov process. We derive several performance measures such as loss probability and waiting time distribution.