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Confidence interval for M/M/2 queue with heterogeneous servers. (English) Zbl 0723.60115
Oper. Res. Lett. 10, No. 2, 99-101 (1991).

The authors use the results of *U. Dave* and *Y. K. Shah* [*J. Oper. Res. Soc.* 31, 423-426 (1980; [Zbl 0447.62078](#))]. Dave and Shah estimated the arrivals and service rates based on maximum likelihood principles assuming the queue in equilibrium. In this paper, *H. W. Lilliefors*' technique [*Oper. Res.* 14, 723-727 (1966)] is employed to derive the confidence intervals for the parameters of M/M/2 queue with heterogeneous servers. In this queueing system, customers wait in line according to their arrival. When both servers are idle, the faster server is scheduled for service before the slower one. The average number of customers N in the system is given by *K. S. Trivedi* [*Probability and statistics with reliability, queueing, and computer science applications* (1982; [Zbl 0513.60001](#), [Zbl 0513.60002](#))] and in another form by the authors of this note.

Reviewer: [G.G.Vranceanu \(București\)](#)

MSC:

[60K25](#) Queueing theory (aspects of probability theory)
[62M99](#) Inference from stochastic processes
[90B22](#) Queues and service in operations research

Cited in **6** Documents

Keywords:

[maximum likelihood principles](#); [queue with heterogeneous servers](#)

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- [5] Trivedi, K.S., *Probability and statistics with reliability, queueing and computer science applications*, (1982), Prentice-Hall Englewood Cliffs, NJ

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