

## AN ANALYSIS ON SHORTEST PARALLEL QUEUEING SYSTEM WITH JOCKEYING

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### ABSTRACT

In this paper, we are investigating shortest parallel queues with jockeying. In general the parallel queue system and customer join the fastest one. The capacity of each queue is restricted to  $N$  including the one being served. There is a FIFO service discipline in which the input stream is Poisson having rate  $\lambda$ . The service time of any customer at server 'i' ( $i=1, 2$ ) is exponential with parameter  $\mu_i$ . The state probability and loss probability of this model are obtained. The performance measures are obtained and optimized. On arrival a job joins the shortest queue and in case both queues have equal length. To obtain mean number of waiting in the system and customer

**KEYWORDS:** Steady State Solution, Shortest Queue, Jockeying, SINGLE Server