

Razumchik R. V. (Moscow, Russia) — **Stationary sojourn time distribution in the $M/GI/2/\infty$ non-preemptive LIFO queue with resampling.**

Consider a system with two identical servers working in parallel, which serve the queue of infinite capacity, whereto jobs arrive one-by-one according to the Poisson process with the known rate. Customers are served from the queue one-by-one according to the LIFO (Last In First Out) rule. Service times, which are assigned to customers once they enter the system, are i.i.d. random variables with the known absolutely continuous distribution $B(x)$. Resampling policy is implemented in the system. It implies that each arriving customer assigns a new remaining service time (sampled from $B(x)$) to each customer in service. Whenever both servers are busy upon arrival of a customer, new remaining service times are sampled independently. Stationary distributions (in terms of Laplace-Stieltjes transform) of the customer's waiting and sojourn time are obtained.

REFERENCES

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