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Study on equilibrium strategy of queuing system with two-stage vacation under incomplete information. (Chinese. English summary) [Zbl 07404445]


Summary: In this paper, we consider the \( M/M/1 \) queuing model with two-stage vacation mode with single working vacation and multiple vacations. Combined with the queuing game theory, we study the steady-state distribution of the system and the equilibrium strategy of customers in the almost unobservable case and full unobservable case. Finally, some numerical examples are given to illustrate the influence of the change of main parameters on the equilibrium strategy of customers under two different information levels.

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91A10 Noncooperative games
90B22 Queues and service in operations research

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work vacation; queuing game theory; equilibrium strategy