

**TIGHTNESS OF STATIONARY WAITING TIMES IN HEAVY TRAFFIC FOR  
GI/GI/1 QUEUES WITH THICK TAILS**

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*Abstract:* Recently, a Heavy Traffic Invariance Principle was proposed by Szczotka and Woyczyński to characterize the heavy traffic limiting distribution of normalized stationary waiting times of G/G/1 queues in terms of an appropriate convergence to a Lévy process. It has two important assumptions. The first of them deals with a convergence to a Lévy process of appropriate processes which is well investigated in the literature. The second one states that the sequence of appropriate normalized stationary waiting times is tight. In the present paper we characterize the tightness condition for the case of GI/GI/1 queues in terms of the first condition.

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