In this section, we present numerical examples to investigate the performance evaluation of CSMA in unslotted cognitive radio networks with a mixed spectrum environment. We set the parameters $c_1 = 4$, $c_2 = 3$ channels, $\mu_1^{-1} = 2$, $\mu_2^{-1} = 2.5(\text{sec})$.

In Fig.2 and Fig.3, we compare the throughput and loss probability of SUs between the case with retrials ($q = 0.7$) and the case without retrials ($q = 0$). Fig.2 (a) depicts the throughput of SUs versus the arrival rate $\lambda_1$ of PUs. As expected, the throughput of SUs decreases as the arrival rate $\lambda_1$ of PUs increases. We see that the throughput of SUs in the case with retrials is larger than that in the case without retrials, because the retrial phenomenon of SUs leads to higher channel utilization of SUs. Fig.2 (b) shows the loss probability of SUs increases as the arrival rate $\lambda_1$ of PUs increases. We also see that the loss probability of SUs in the case without retrials is larger than that in the case with retrials because all blocked SUs are lost in the model without retrials. Fig.3 (a) and (b) depict the throughput of SUs and loss probability of SUs versus the arrival rate $\lambda_2$ of SUs. Fig.2 and