

Python 3.6.4 |Anaconda custom (64-bit)| (default, Jan 16 2018, 10:22:32) [MSC v.1900 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 6.2.1 -- An enhanced Interactive Python.

Restarting kernel...

In [1]: runfile('E:/Daniel/Projects/PhD-RL-Toulouse/projects/Python/test/test_QB.py', wdir='E:/Daniel/Projects/PhD-RL-Toulouse/projects/Python/test')

Directory:

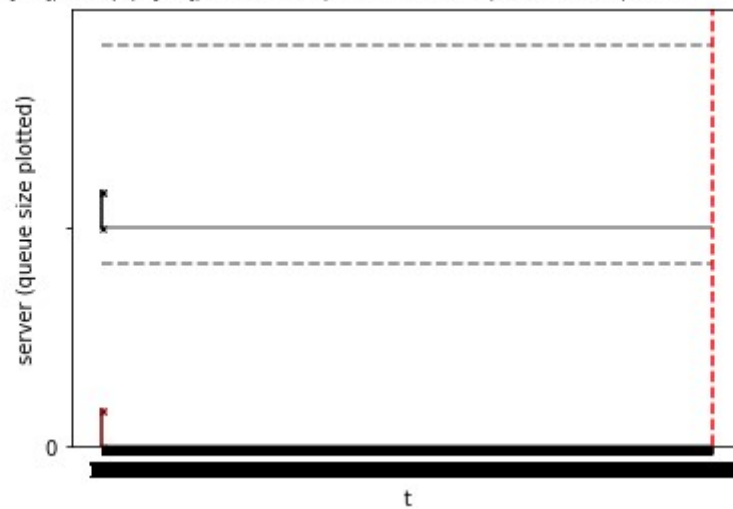
E:\Daniel\Projects\PhD-RL-Toulouse\projects

has been prepended to the module search path.

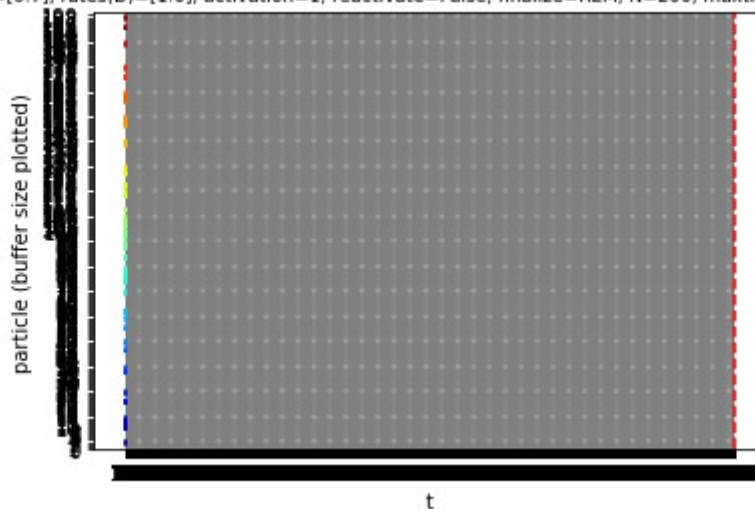
Log file '../RL-002-QueueBlocking/logs/analyze_convergence_20210419_122505.log' has been open for output.

Started at: 2021-04-19 12:25:05

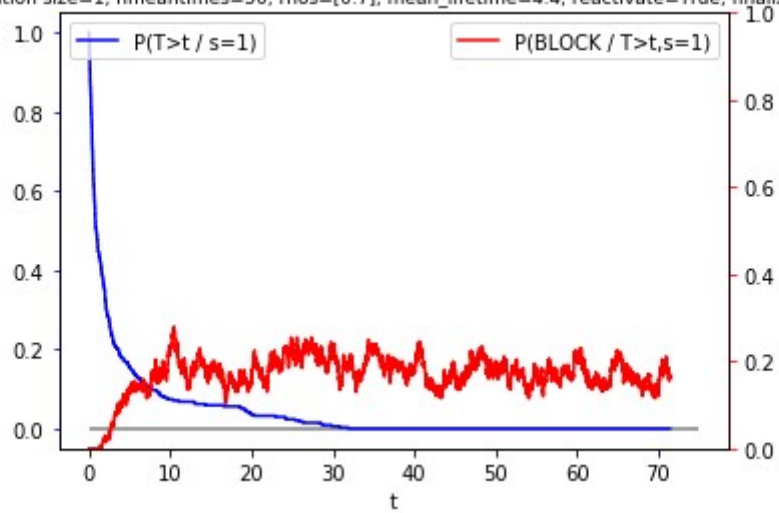
Particle 0: K=5, rates(B)=[0.7], rates(D)=[1.0], activation=1, reactivate=False, finalize=REM, #servers=1, maxtime=14285.7, seed=1313



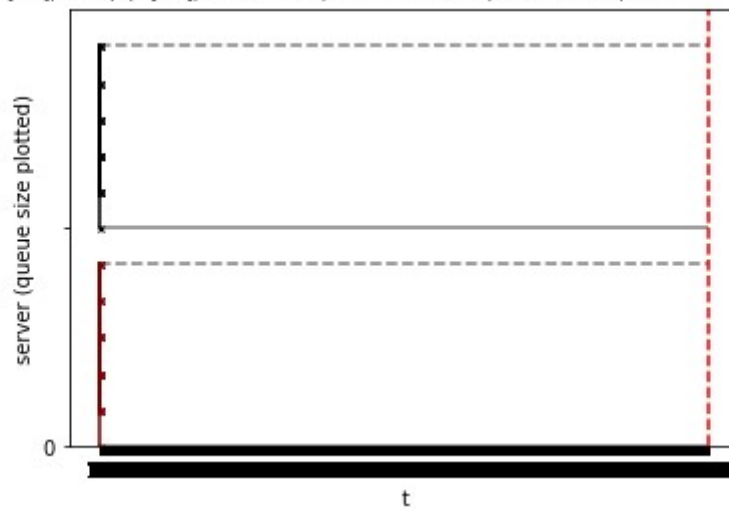
K=5, rates(B)=[0.7], rates(D)=[1.0], activation=1, reactivate=False, finalize=REM, N=200, maxtime=14285.7, seed=1313



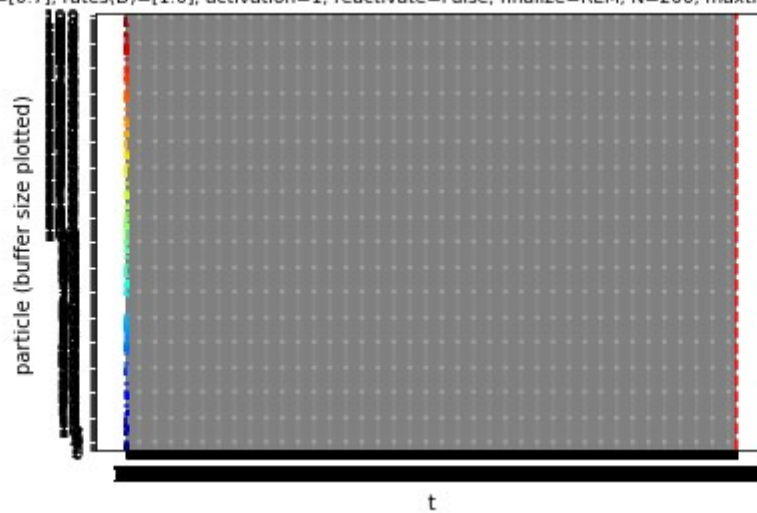
K=5, N=200, activation size=1, nmeantimes=50, rhos=[0.7], mean_lifetime=4.4, reactivate=True, finalize=ABS, seed=1313



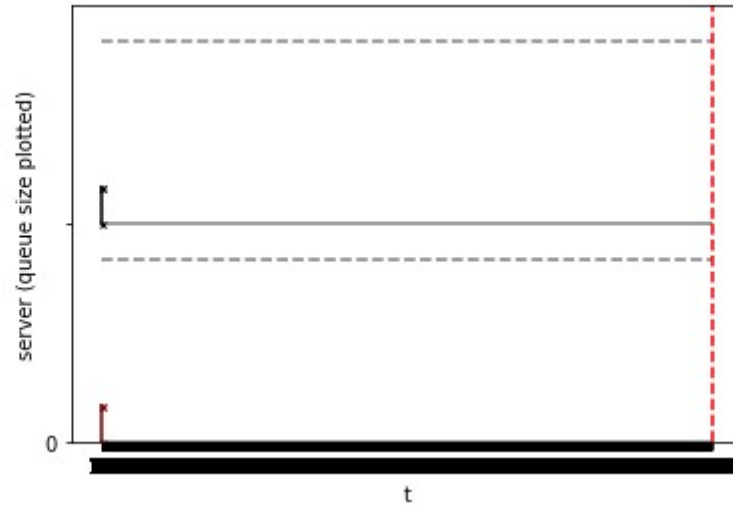
Particle 0: K=5, rates(B)=[0.7], rates(D)=[1.0], activation=1, reactivate=False, finalize=REM, #servers=1, maxtime=14285.7, seed=1314



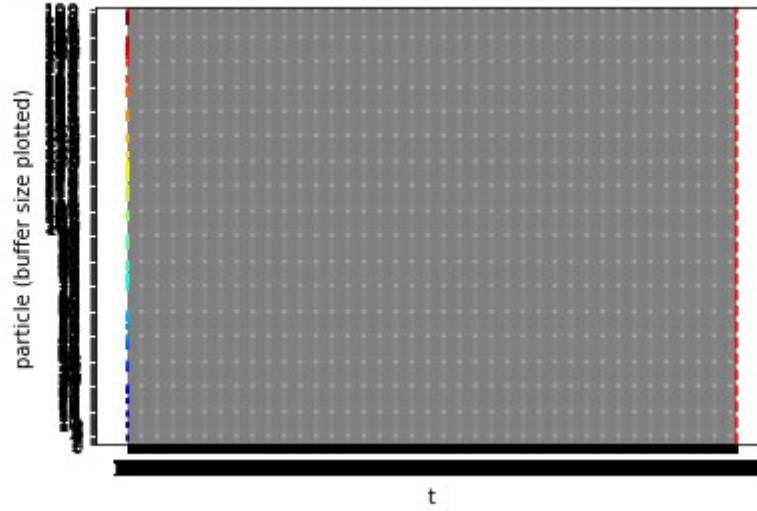
K=5, rates(B)=[0.7], rates(D)=[1.0], activation=1, reactivate=False, finalize=REM, N=200, maxtime=14285.7, seed=1314



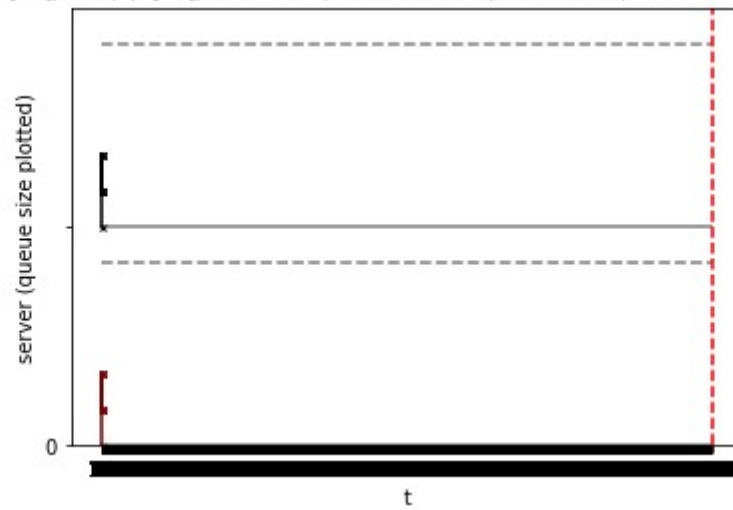
Particle 0: $K=5$, $\text{rates}(B)=[0.7]$, $\text{rates}(D)=[1.0]$, $\text{activation}=1$, $\text{reactivate}=\text{False}$, $\text{finalize}=\text{REM}$, $\#\text{servers}=1$, $\text{maxtime}=14285.7$, $\text{seed}=1315$



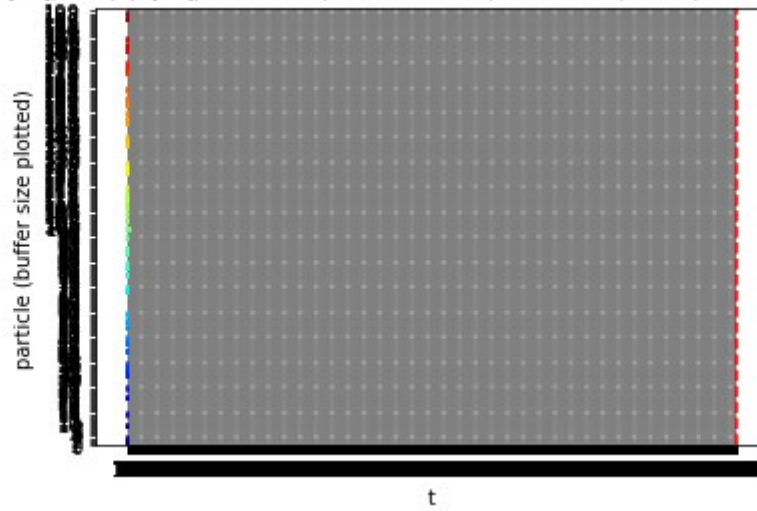
$K=5$, $\text{rates}(B)=[0.7]$, $\text{rates}(D)=[1.0]$, $\text{activation}=1$, $\text{reactivate}=\text{False}$, $\text{finalize}=\text{REM}$, $N=200$, $\text{maxtime}=14285.7$, $\text{seed}=1315$



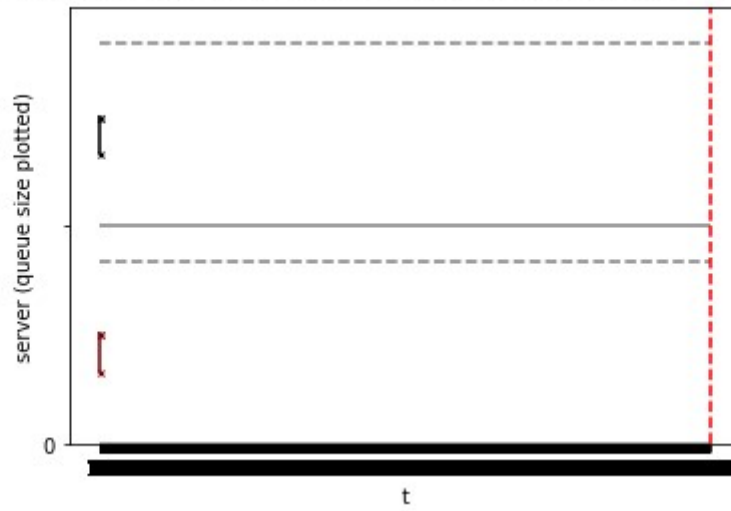
Particle 0: $K=5$, $\text{rates}(B)=[0.7]$, $\text{rates}(D)=[1.0]$, $\text{activation}=1$, $\text{reactivate}=\text{False}$, $\text{finalize}=\text{REM}$, $\#\text{servers}=1$, $\text{maxtime}=14285.7$, $\text{seed}=1316$



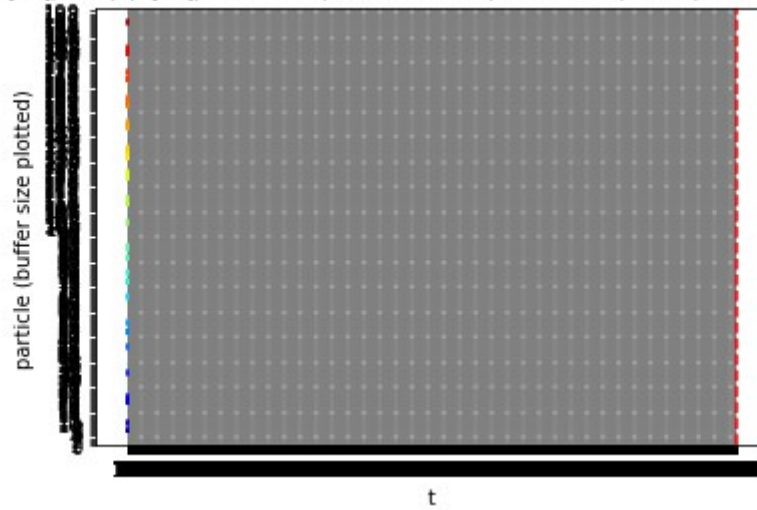
K=5, rates(B)=[0.7], rates(D)=[1.0], activation=1, reactivate=False, finalize=REM, N=200, maxtime=14285.7, seed=1316



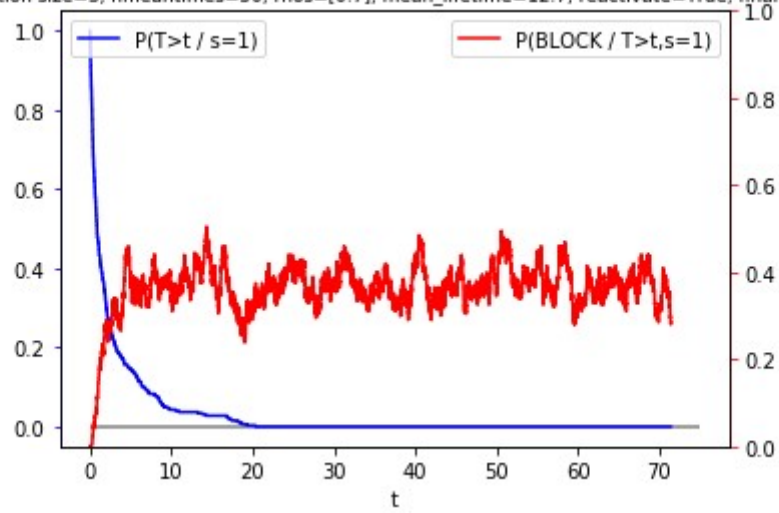
Particle 0: K=5, rates(B)=[0.7], rates(D)=[1.0], activation=3, reactivate=False, finalize=REM, #servers=1, maxtime=14285.7, seed=1313



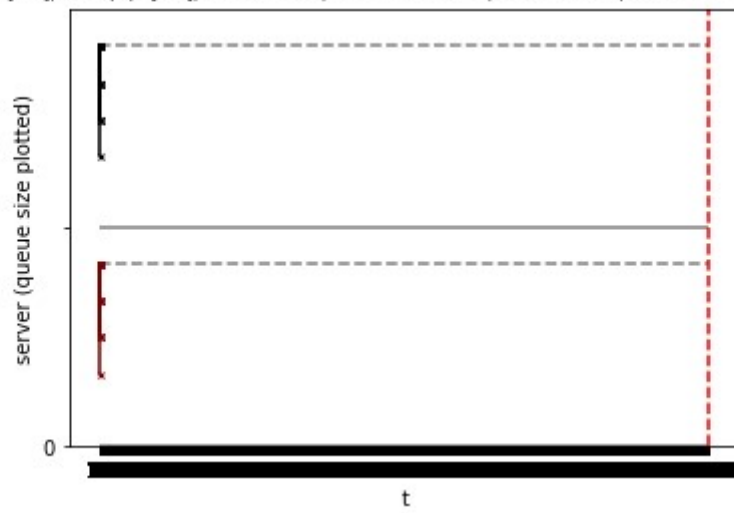
K=5, rates(B)=[0.7], rates(D)=[1.0], activation=3, reactivate=False, finalize=REM, N=200, maxtime=14285.7, seed=1313



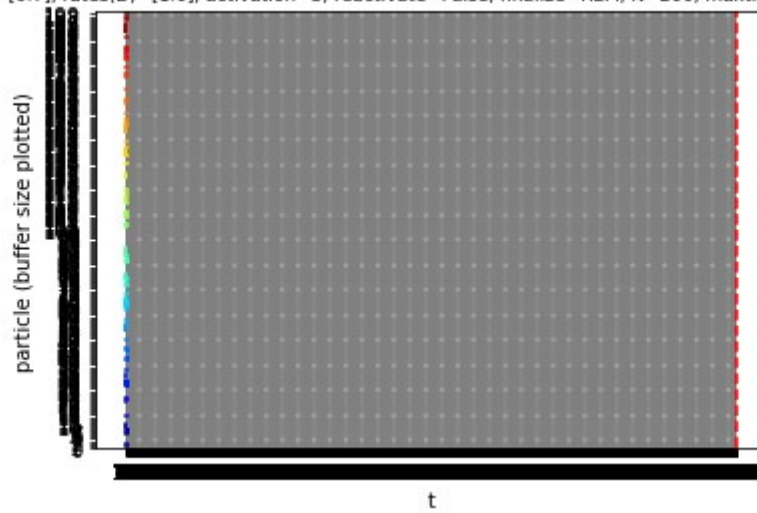
K=5, N=200, activation size=3, nmeantimes=50, rhos=[0.7], mean_lifetime=12.7, reactivate=True, finalize=ABS, seed=1313



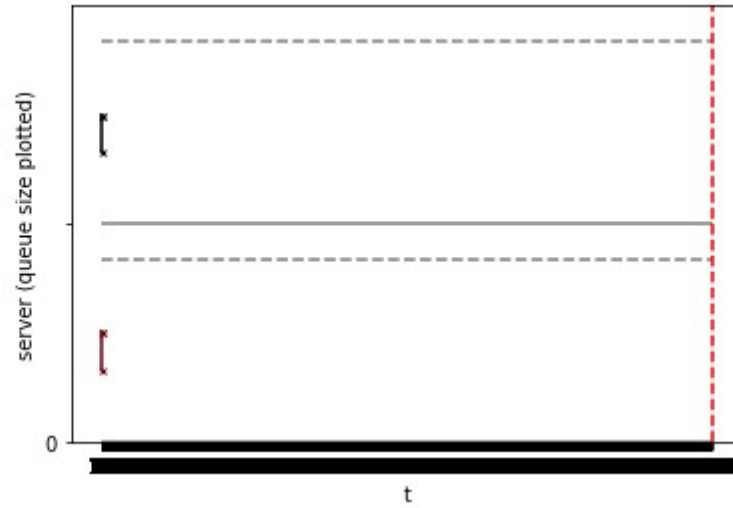
Particle 0: K=5, rates(B)=[0.7], rates(D)=[1.0], activation=3, reactivate=False, finalize=REM, #servers=1, maxtime=14285.7, seed=1314



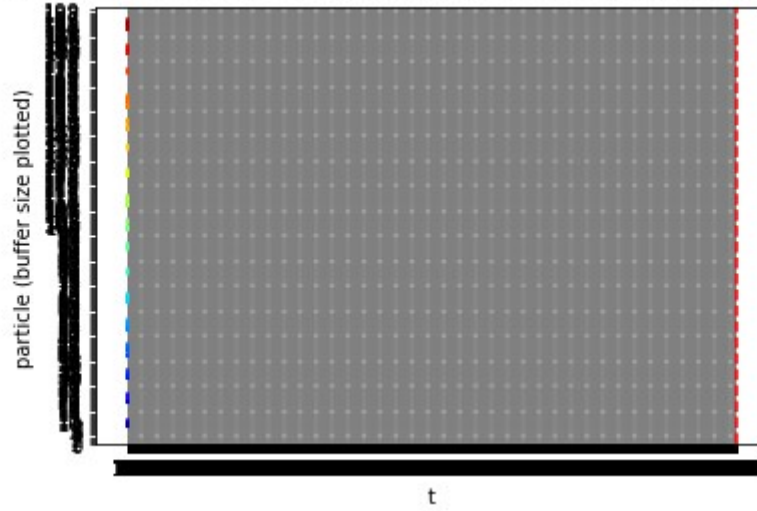
K=5, rates(B)=[0.7], rates(D)=[1.0], activation=3, reactivate=False, finalize=REM, N=200, maxtime=14285.7, seed=1314



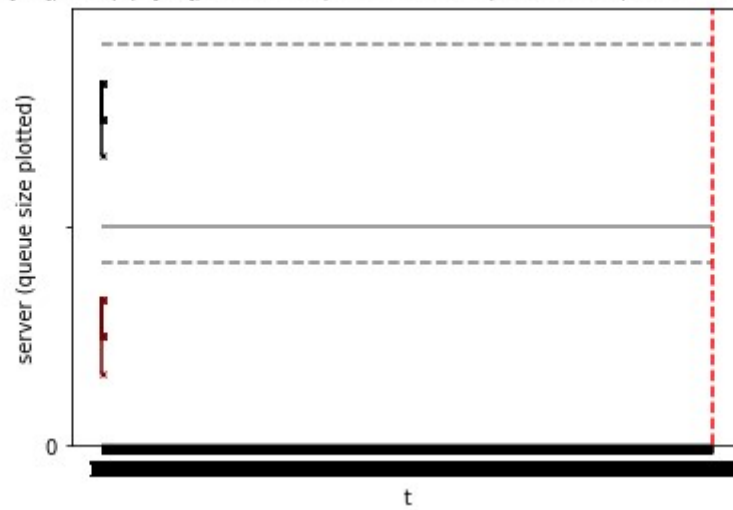
Particle 0: $K=5$, $\text{rates}(B)=[0.7]$, $\text{rates}(D)=[1.0]$, $\text{activation}=3$, $\text{reactivate}=\text{False}$, $\text{finalize}=\text{REM}$, $\#\text{servers}=1$, $\text{maxtime}=14285.7$, $\text{seed}=1315$



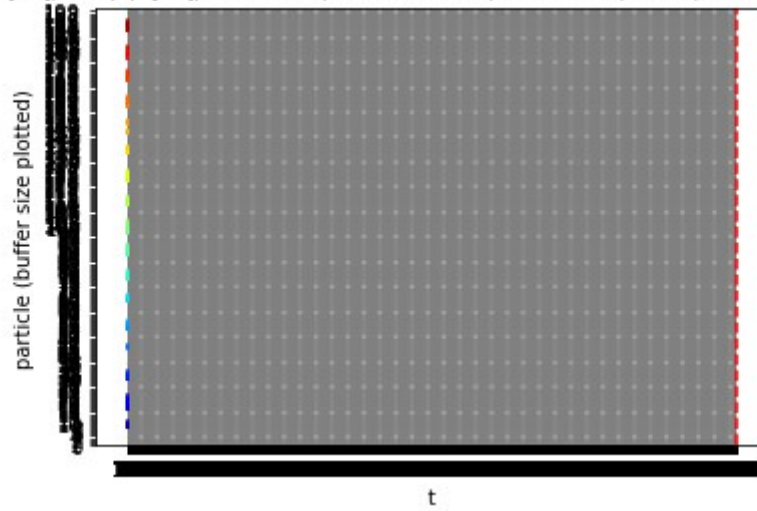
$K=5$, $\text{rates}(B)=[0.7]$, $\text{rates}(D)=[1.0]$, $\text{activation}=3$, $\text{reactivate}=\text{False}$, $\text{finalize}=\text{REM}$, $N=200$, $\text{maxtime}=14285.7$, $\text{seed}=1315$



Particle 0: $K=5$, $\text{rates}(B)=[0.7]$, $\text{rates}(D)=[1.0]$, $\text{activation}=3$, $\text{reactivate}=\text{False}$, $\text{finalize}=\text{REM}$, $\#\text{servers}=1$, $\text{maxtime}=14285.7$, $\text{seed}=1316$



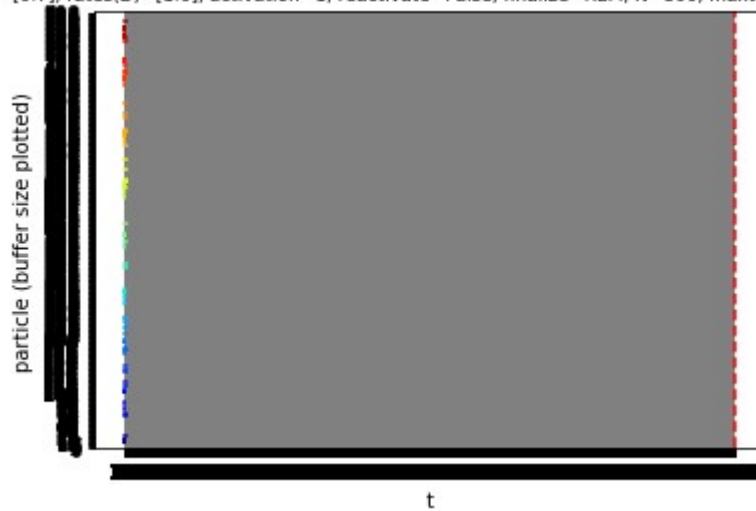
K=5, rates(B)=[0.7], rates(D)=[1.0], activation=3, reactivate=False, finalize=REM, N=200, maxtime=14285.7, seed=1316



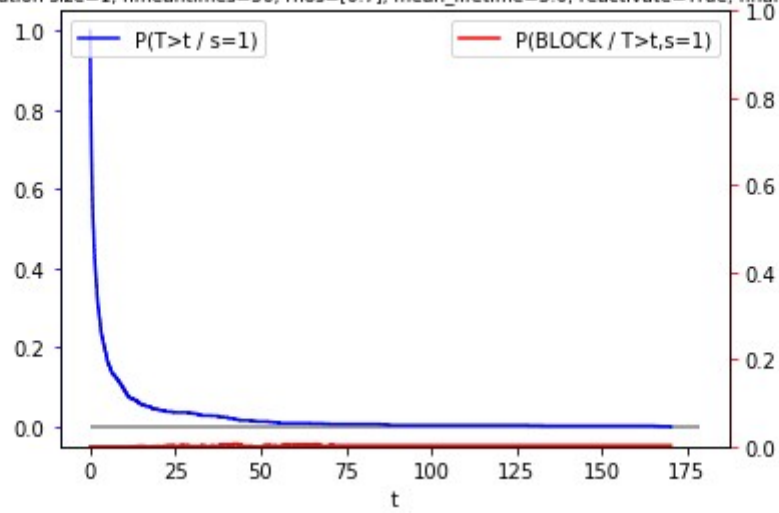
Particle 0: K=20, rates(B)=[0.7], rates(D)=[1.0], activation=1, reactivate=False, finalize=REM, #servers=1, maxtime=57142.9, seed=1313



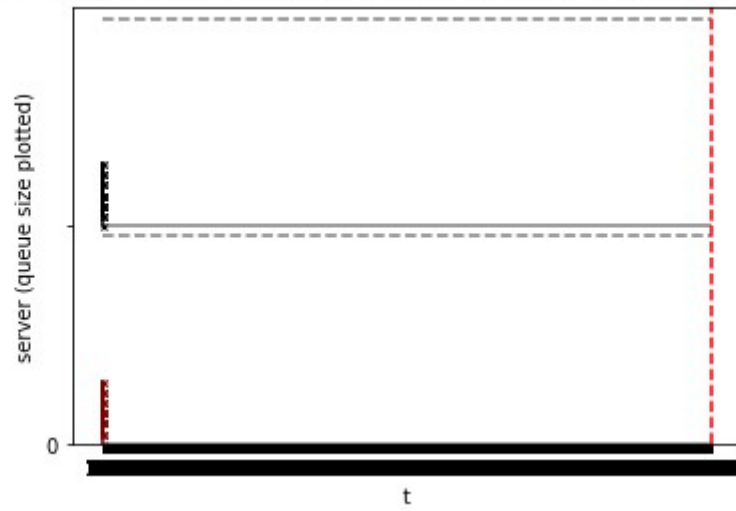
K=20, rates(B)=[0.7], rates(D)=[1.0], activation=1, reactivate=False, finalize=REM, N=800, maxtime=57142.9, seed=1313



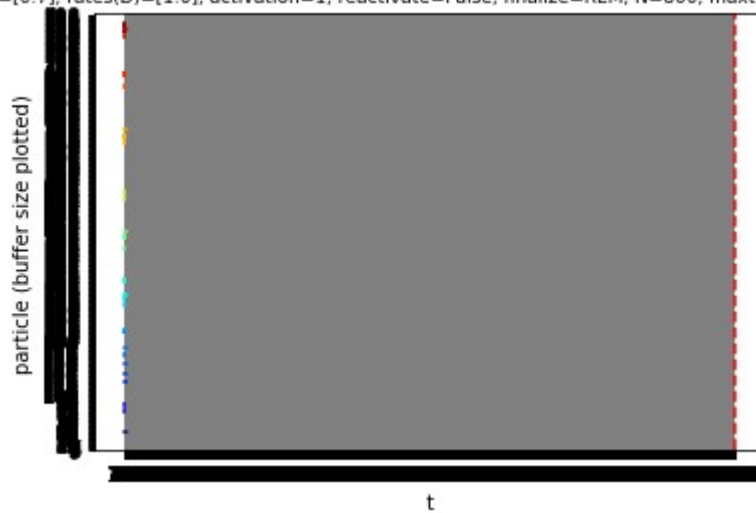
K=20, N=800, activation size=1, nmeantimes=50, rhos=[0.7], mean_lifetime=5.0, reactivate=True, finalize=ABS, seed=1313



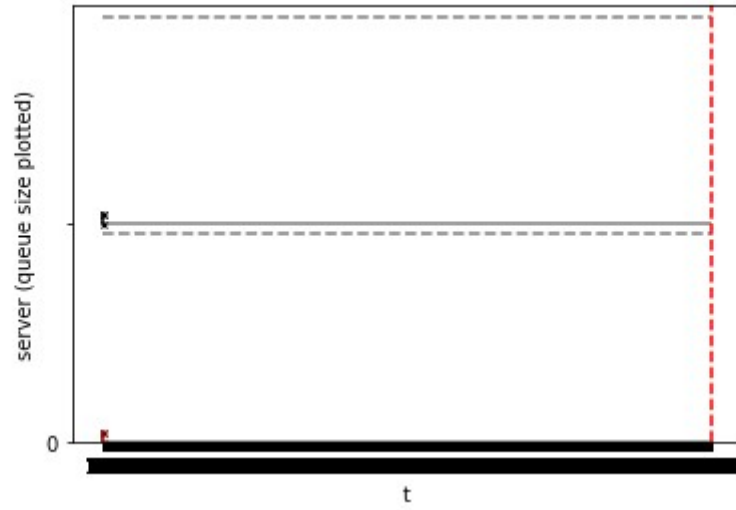
Particle 0: K=20, rates(B)=[0.7], rates(D)=[1.0], activation=1, reactivate=False, finalize=REM, #servers=1, maxtime=57142.9, seed=1314



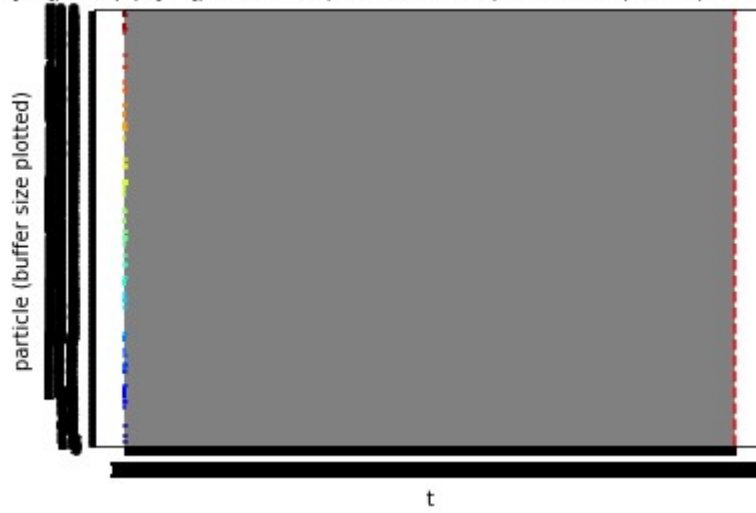
K=20, rates(B)=[0.7], rates(D)=[1.0], activation=1, reactivate=False, finalize=REM, N=800, maxtime=57142.9, seed=1314



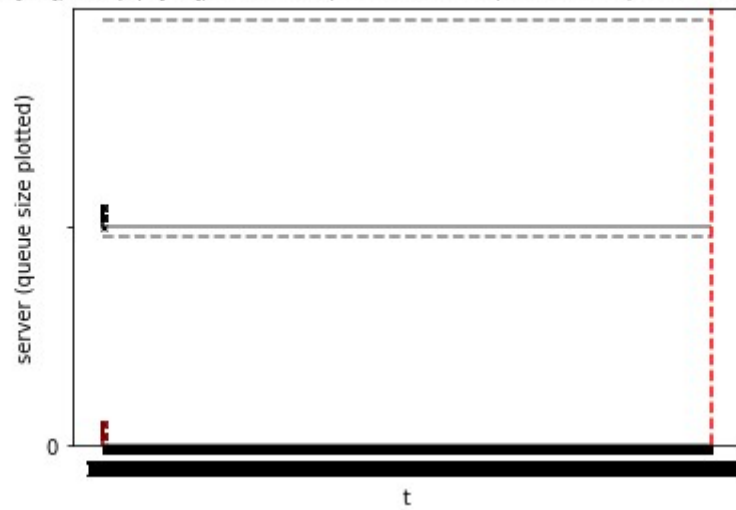
Particle 0: $K=20$, $\text{rates}(B)=[0.7]$, $\text{rates}(D)=[1.0]$, $\text{activation}=1$, $\text{reactivate}=\text{False}$, $\text{finalize}=\text{REM}$, $\#\text{servers}=1$, $\text{maxtime}=57142.9$, $\text{seed}=1315$



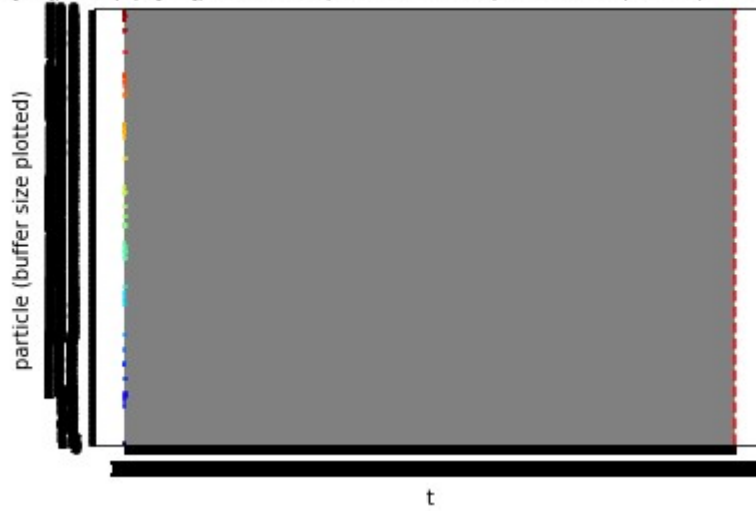
$K=20$, $\text{rates}(B)=[0.7]$, $\text{rates}(D)=[1.0]$, $\text{activation}=1$, $\text{reactivate}=\text{False}$, $\text{finalize}=\text{REM}$, $N=800$, $\text{maxtime}=57142.9$, $\text{seed}=1315$



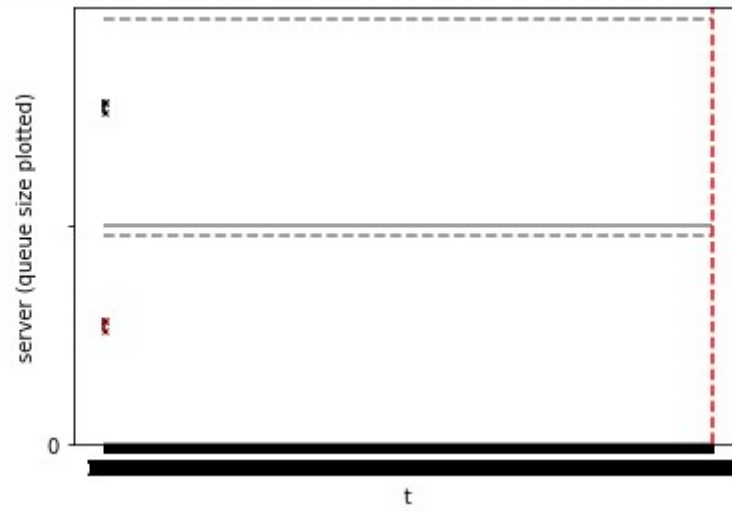
Particle 0: $K=20$, $\text{rates}(B)=[0.7]$, $\text{rates}(D)=[1.0]$, $\text{activation}=1$, $\text{reactivate}=\text{False}$, $\text{finalize}=\text{REM}$, $\#\text{servers}=1$, $\text{maxtime}=57142.9$, $\text{seed}=1316$



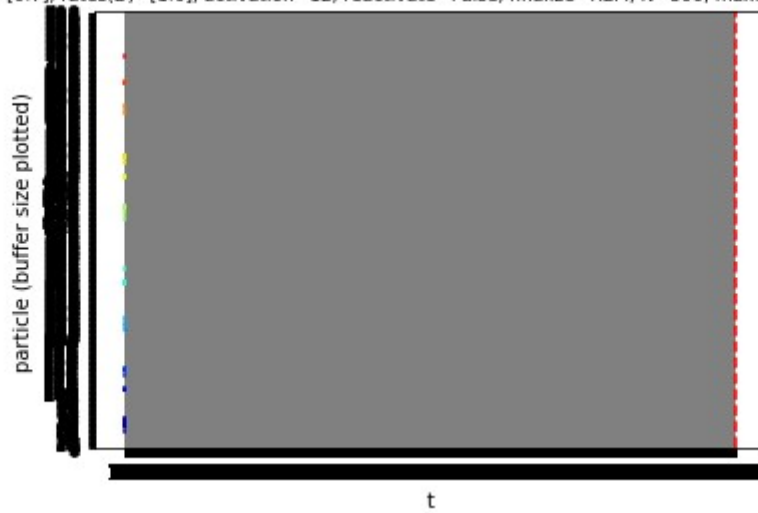
K=20, rates(B)=[0.7], rates(D)=[1.0], activation=1, reactivate=False, finalize=REM, N=800, maxtime=57142.9, seed=1316



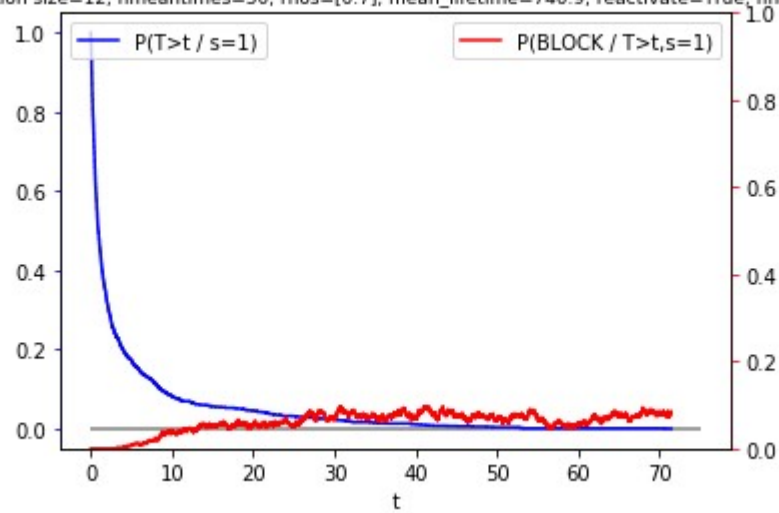
Particle 0: K=20, rates(B)=[0.7], rates(D)=[1.0], activation=12, reactivate=False, finalize=REM, #servers=1, maxtime=57142.9, seed=1313



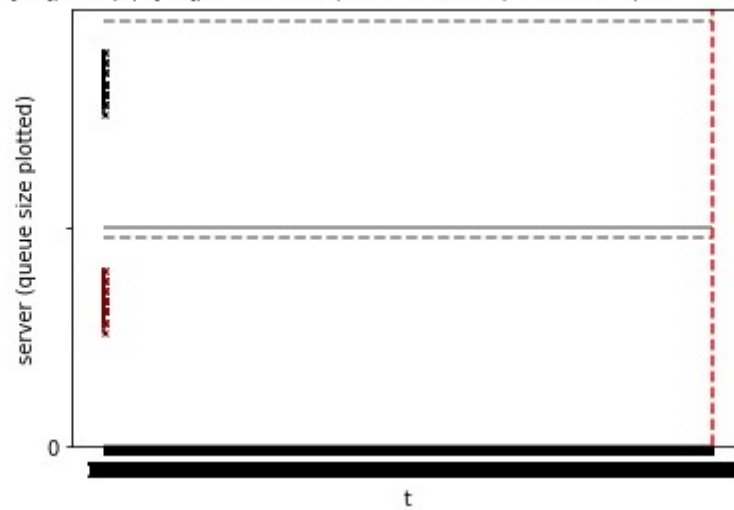
K=20, rates(B)=[0.7], rates(D)=[1.0], activation=12, reactivate=False, finalize=REM, N=800, maxtime=57142.9, seed=1313



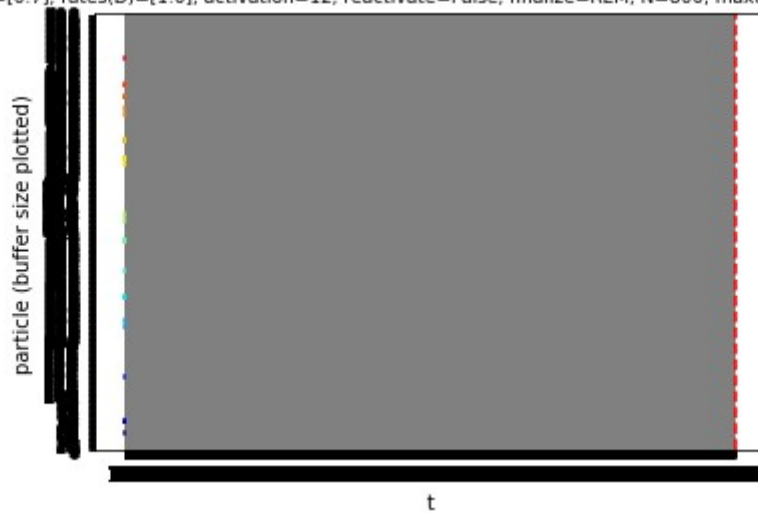
K=20, N=800, activation size=12, nmeantimes=50, rhos=[0.7], mean_lifetime=740.9, reactivate=True, finalize=ABS, seed=1313



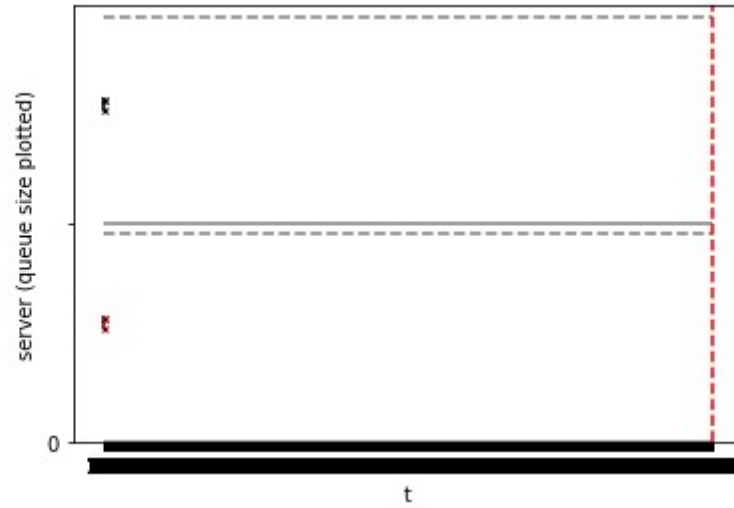
Particle 0: K=20, rates(B)=[0.7], rates(D)=[1.0], activation=12, reactivate=False, finalize=REM, #servers=1, maxtime=57142.9, seed=1314



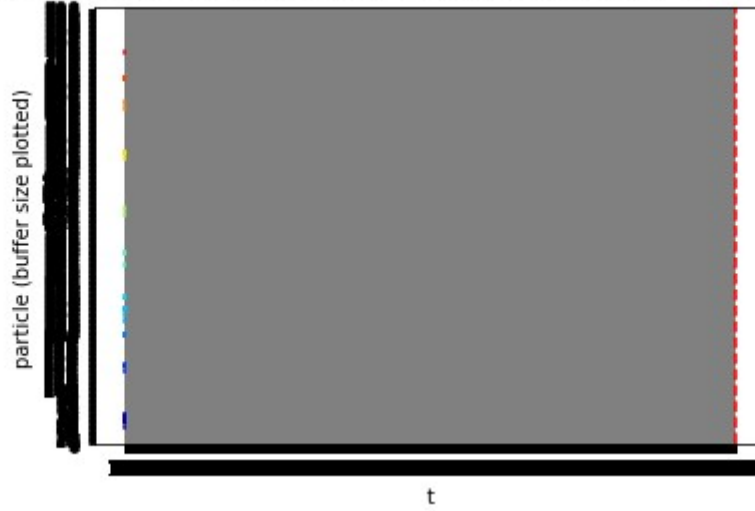
K=20, rates(B)=[0.7], rates(D)=[1.0], activation=12, reactivate=False, finalize=REM, N=800, maxtime=57142.9, seed=1314



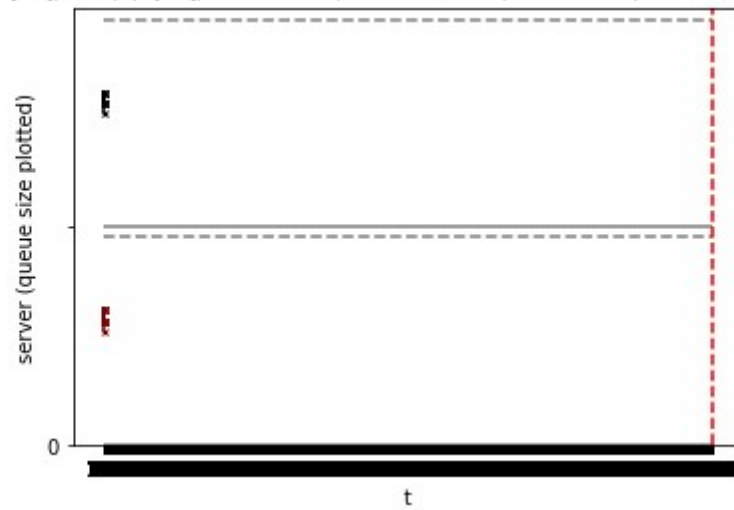
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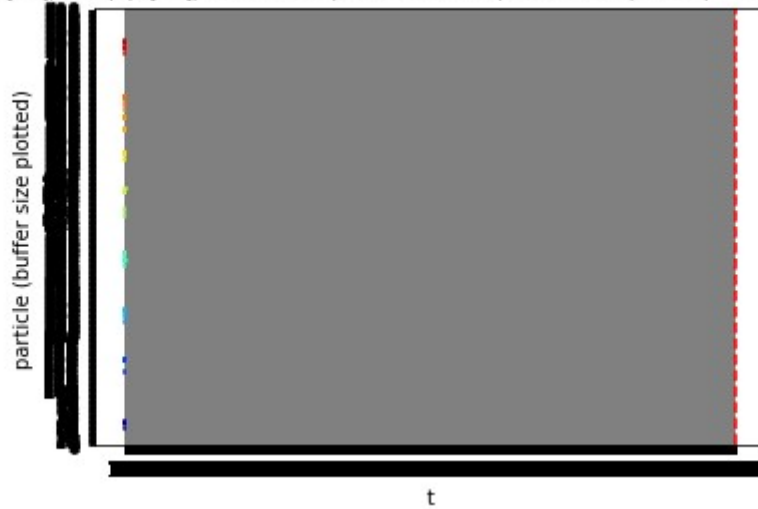
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Particle 0: $K=20$, $\text{rates}(B)=[0.7]$, $\text{rates}(D)=[1.0]$, $\text{activation}=12$, $\text{reactivate}=\text{False}$, $\text{finalize}=\text{REM}$, $\text{\#servers}=1$, $\text{maxtime}=57142.9$, $\text{seed}=1316$



K=20, rates(B)=[0.7], rates(D)=[1.0], activation=12, reactivate=False, finalize=REM, N=800, maxtime=57142.9, seed=1316



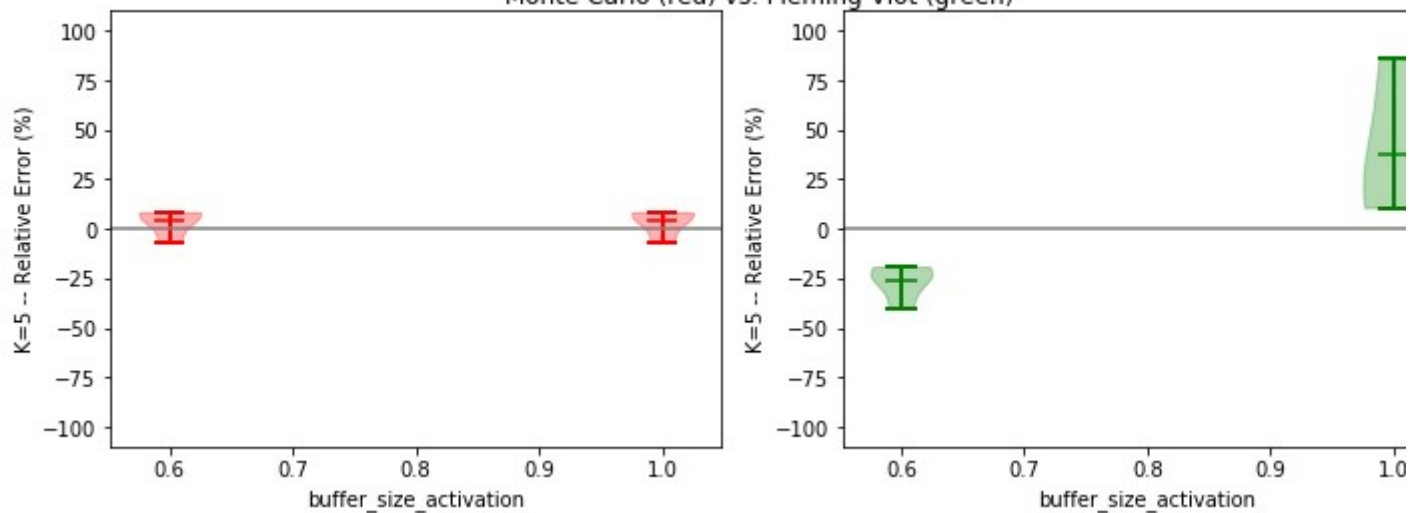
C:\ProgramData\Anaconda\Anaconda3\lib\site-packages\pandas\core\groupby.py:4291: FutureWarning: using a dict with renaming is deprecated and will be removed in a future version

```
return super(DataFrameGroupBy, self).aggregate(arg, *args, **kwargs)
```

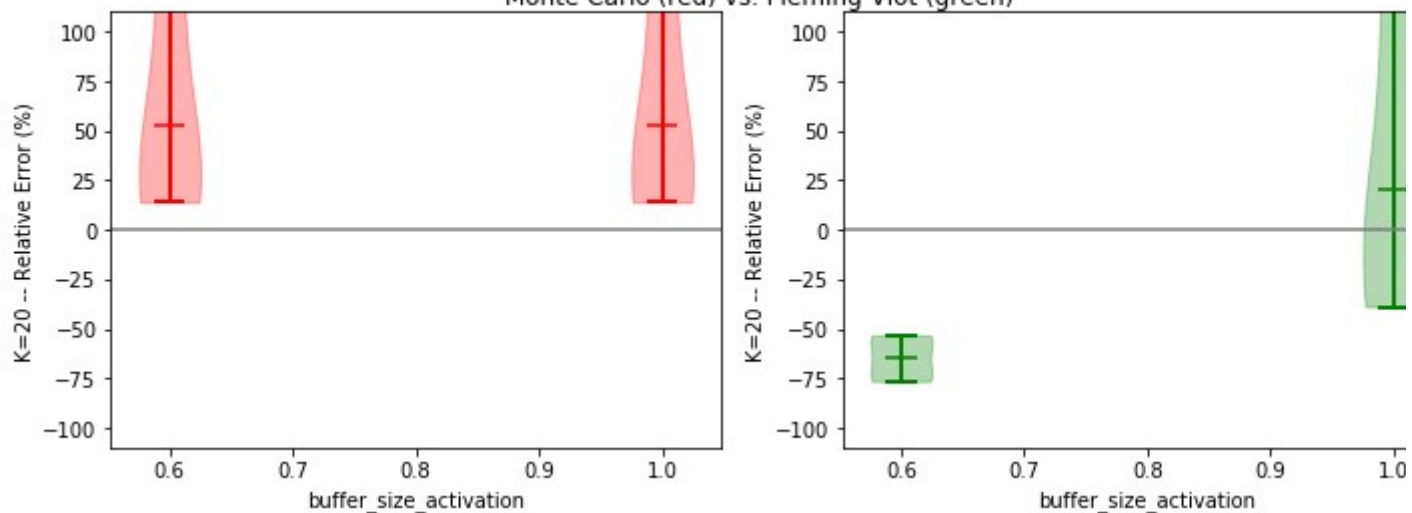
Ended at: 2021-04-19 14:52:29

Execution time: 147.4 min, 2.5 hours

Error distribution of blocking probability estimation $\Pr(K=5)$ on 4 replications
Monte Carlo (red) vs. Fleming Viot (green)



Error distribution of blocking probability estimation $\Pr(K=20)$ on 4 replications
Monte Carlo (red) vs. Fleming Viot (green)



In [2]: