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.

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/test\_fv\_implementation\_20210503\_234728.log' has been open for output.

Started at: 2021-05-03 23:47:28

C:\ProgramData\Anaconda\Anaconda3\lib\site-packages\matplotlib\pyplot.py:528: RuntimeWarning: More than 20 figures have been opened. Figures created through the pyplot interface (`matplotlib.pyplot.figure`) are retained until explicitly closed and may consume too much memory. (To control this warning, see the rcParam `figure.max open\_warning`).

max\_open\_warning, RuntimeWarning)

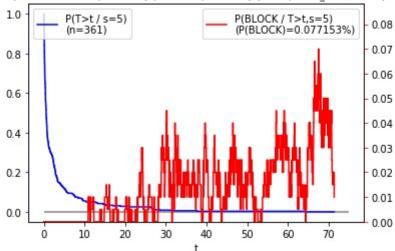
C:\ProgramData\Anaconda\Anaconda3\lib\site-packages\pandas\core\groupby.py:4291: FutureWarning: using a dict with renaming is deprecated and will be removed in a future version

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

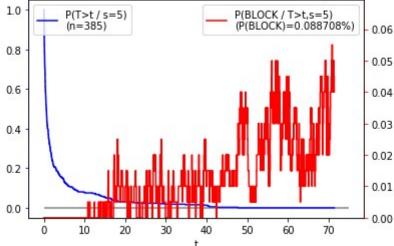
Ended at: 2021-05-04 02:12:50

Execution time: 145.4 min, 2.4 hours

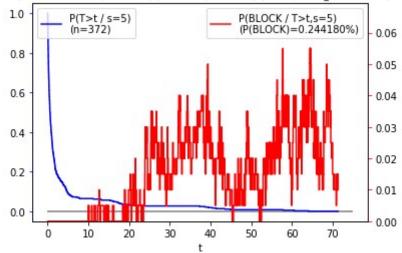
K=20, rhos=[0.4, 0.75, 0.35], N=200, activation size=5, maxtime(1)=14285.7, maxtime(N)=71.4, mean\_lifetime=6.1(n=2323), finalize=ABS, seed=1711



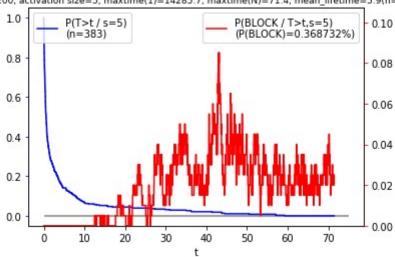
K=20, rhos=[0.4, 0.75, 0.35], N=200, activation size=5, maxtime(1)=14285.7, maxtime(N)=71.4, mean\_lifetime=6.0(n=2369), finalize=ABS, seed=171!



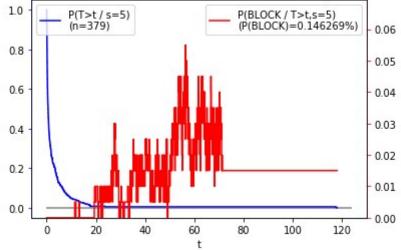
K=20, rhos=[0.4, 0.75, 0.35], N=200, activation size=5, maxtime(1)=14285.7, maxtime(N)=71.4, mean\_lifetime=6.2(n=2287), finalize=ABS, seed=1721



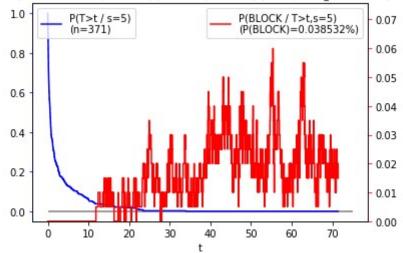
 $K=20, \ rhos=[0.4, \ 0.75, \ 0.35], \ N=200, \ activation \ size=5, \ maxtime(1)=14285.7, \ maxtime(N)=71.4, \ mean\_lifetime=5.9 (n=2431), \ finalize=ABS, \ seed=172.0 (n=2$ 



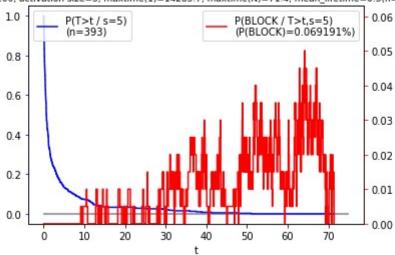
 $K=20, \ rhos=[0.4,\ 0.75,\ 0.35],\ N=200,\ activation\ size=5,\ maxtime(1)=14285.7,\ maxtime(N)=71.4,\ mean\_lifetime=5.9 (n=2405),\ finalize=ABS,\ seed=172.0 (n=2405),\ finalize=ABS,\ seed=172.0$ 



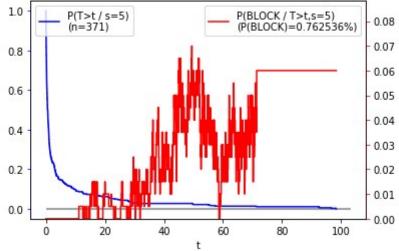
K=20, rhos=[0.4, 0.75, 0.35], N=200, activation size=5, maxtime(1)=14285.7, maxtime(N)=71.4, mean\_lifetime=6.0(n=2372), finalize=ABS, seed=172:



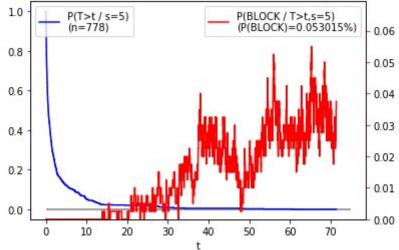
K=20, rhos=[0.4, 0.75, 0.35], N=200, activation size=5, maxtime(1)=14285.7, maxtime(N)=71.4, mean\_lifetime=6.3(n=2266), finalize=ABS, seed=172i



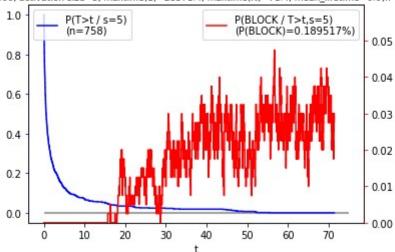
 $K=20, \ rhos=[0.4, \ 0.75, \ 0.35], \ N=200, \ activation \ size=5, \ maxtime(1)=14285.7, \ maxtime(N)=71.4, \ mean\_lifetime=6.1(n=2331), \ finalize=ABS, \ seed=172.12, \ mean\_lifetime=6.1(n=2331), \ mean\_lifetime=6.1$ 



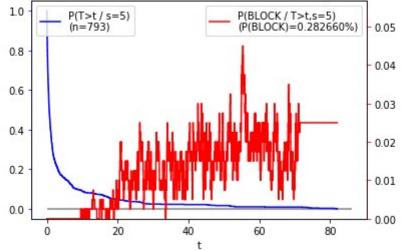
K=20, rhos=[0.4, 0.75, 0.35], N=400, activation size=5, maxtime(1)=28571.4, maxtime(N)=71.4, mean\_lifetime=6.3(n=4568), finalize=ABS, seed=171i



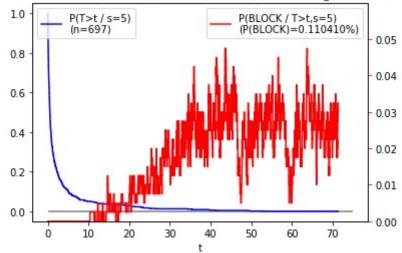
K=20, rhos=[0.4, 0.75, 0.35], N=400, activation size=5, maxtime(1)=28571.4, maxtime(N)=71.4, mean\_lifetime=6.0(n=4768), finalize=ABS, seed=171!



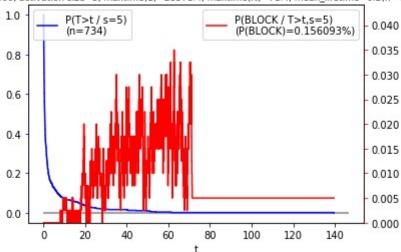
 $K=20, \\ rhos=[0.4, 0.75, 0.35], \\ N=400, \\ activation \\ size=5, \\ maxtime(1)=28571.4, \\ maxtime(N)=71.4, \\ mean\_lifetime=6.1 \\ (n=4701), \\ finalize=ABS, \\ seed=1721.4, \\ maxtime(N)=172.4, \\ maxtime(N)=172$ 



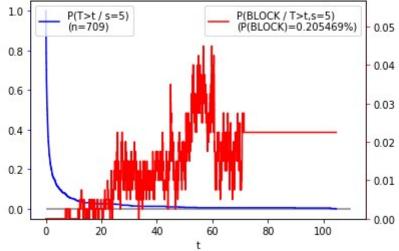
K=20, rhos=[0.4, 0.75, 0.35], N=400, activation size=5, maxtime(1)=28571.4, maxtime(N)=71.4, mean\_lifetime=5.9(n=4857), finalize=ABS, seed=172



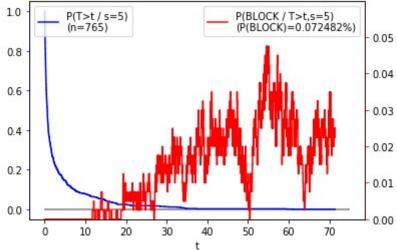
K=20, rhos=[0.4, 0.75, 0.35], N=400, activation size=5, maxtime(1)=28571.4, maxtime(N)=71.4, mean\_lifetime=6.2(n=4634), finalize=ABS, seed=172i



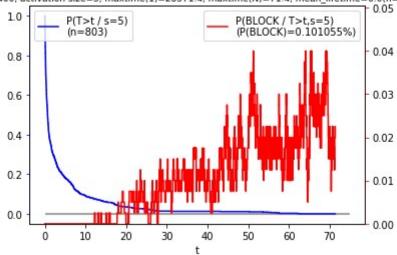
 $K=20, \\ rhos=[0.4, 0.75, 0.35], \\ N=400, \\ activation \\ size=5, \\ maxtime(1)=28571.4, \\ maxtime(N)=71.4, \\ mean\_lifetime=5.9 \\ (n=4830), \\ finalize=ABS, \\ seed=172.12 \\ mean\_lifetime=5.0 \\ (n=4830), \\ seed=172.12 \\ mean\_lifetime=5.0 \\ (n=4830), \\ seed=172.12 \\ mean\_lifetime=5.0 \\ m$ 



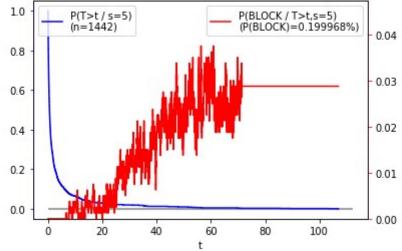
K=20, rhos=[0.4, 0.75, 0.35], N=400, activation size=5, maxtime(1)=28571.4, maxtime(N)=71.4, mean\_lifetime=6.1(n=4672), finalize=ABS, seed=172i



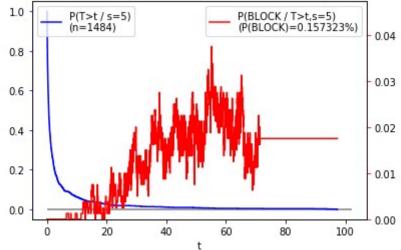
K=20, rhos=[0.4, 0.75, 0.35], N=400, activation size=5, maxtime(1)=28571.4, maxtime(N)=71.4, mean\_lifetime=6.0(n=4730), finalize=ABS, seed=172!



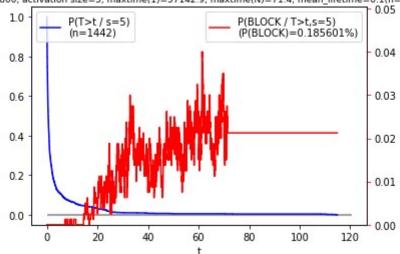
 $K=20, \\ rhos=[0.4, 0.75, 0.35], \\ N=800, \\ activation \\ size=5, \\ maxtime(1)=57142.9, \\ maxtime(N)=71.4, \\ mean\_lifetime=6.3 \\ (n=9131), \\ finalize=ABS, \\ seed=1711.4, \\ mean\_lifetime=6.3 \\ (n=9131), \\ mean\_lifetime=6.3 \\ (n=$ 



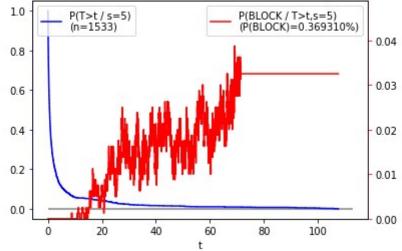
 $K=20, \\ rhos=[0.4, 0.75, 0.35], \\ N=800, \\ activation \\ size=5, \\ maxtime(1)=57142.9, \\ maxtime(N)=71.4, \\ mean\_lifetime=6.1 \\ (n=9380), \\ finalize=ABS, \\ seed=1719.0 \\ maxtime(1)=57142.9, \\ maxtime(N)=71.4, \\ mean\_lifetime=6.1 \\ maxtime(N)=171.4, \\ mean\_lifetime=6.1 \\ maxtime(N)=6.1 \\ mean\_lifetime=6.1 \\ mean\_lifetime=6.1$ 



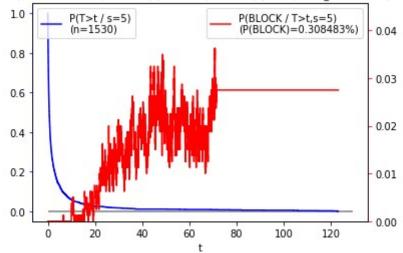
K=20, rhos=[0.4, 0.75, 0.35], N=800, activation size=5, maxtime(1)=57142.9, maxtime(N)=71.4, mean\_lifetime=6.1(n=9304), finalize=ABS, seed=172i



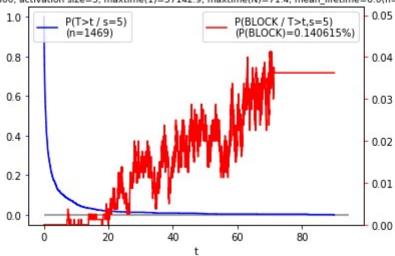
K=20, rhos=[0.4, 0.75, 0.35], N=800, activation size=5, maxtime(1)=57142.9, maxtime(N)=71.4, mean\_lifetime=5.9(n=9677), finalize=ABS, seed=172.



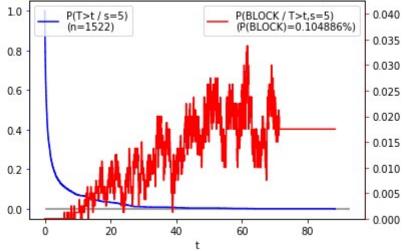
K=20, rhos=[0.4, 0.75, 0.35], N=800, activation size=5, maxtime(1)=57142.9, maxtime(N)=71.4, mean\_lifetime=6.1(n=9439), finalize=ABS, seed=172.

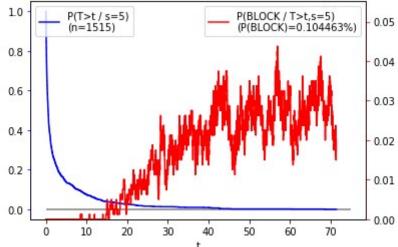


K=20, rhos=[0.4, 0.75, 0.35], N=800, activation size=5, maxtime(1)=57142.9, maxtime(N)=71.4, mean\_lifetime=6.0(n=9584), finalize=ABS, seed=172:

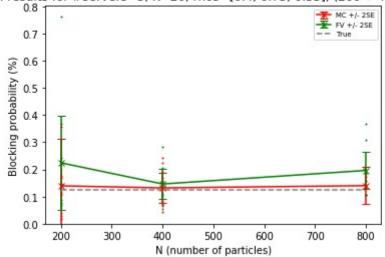


 $K=20, \ rhos=[0.4, \ 0.75, \ 0.35], \ N=800, \ activation \ size=5, \ maxtime(1)=57142.9, \ maxtime(N)=71.4, \ mean\_lifetime=6.0 (n=9494), \ finalize=ABS, \ seed=172.0 (n=9$ 

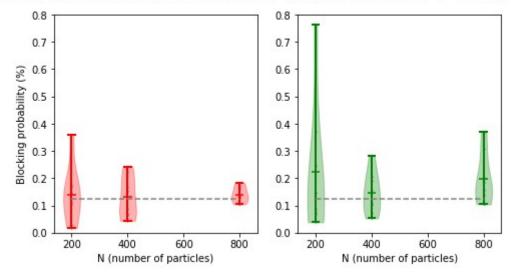




Simulation results for #servers=3, K=20, rhos=[0.4, 0.75, 0.35], (200<=N<=800), T<=71



Simulation results for #servers=3, K=20, rhos=[0.4, 0.75, 0.35], (200<=N<=800), T<=71



In [2]: