```
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...
```

```
 runfile('E:/Daniel/Projects/PhD-RL-Toulouse/projects/Python/lib/estimators.py', wdir='E:/Daniel/
Projects/PhD-RL-Toulouse/projects/Python/lib')
Directory:
E:\Daniel\Projects\PhD-RL-Toulouse\projects
has been prepended to the module search path.
Test #3: compare variability of survival curve among different replications --goal: find out why we get
so much variability in the FV estimation of the blocking probability (CV ~ 60%!)

Running Monte-Carlo simulation on single-server system to estimate survival probability curve for
buffer_size_activation=8 on N=200 particles and simulation time T=50x...
Block of particle indices to simulate #0: [0, 199] (N=200)
simulate_survival: Total simulation time: 0.0 min


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buffer_size_activation=8 on N=200 particles and simulation time T=50x...
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buffer_size_activation=8 on N=200 particles and simulation time T=50x...
Block of particle indices to simulate #0: [0, 199] (N=200)
```

```
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Running Monte-Carlo simulation on single-server system to estimate survival probability curve for
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buffer_size_activation=8 on N=200 particles and simulation time T=50x...
Block of particle indices to simulate #0: [0, 199] (N=200)
simulate_survival: Total simulation time: 0.0 min
```
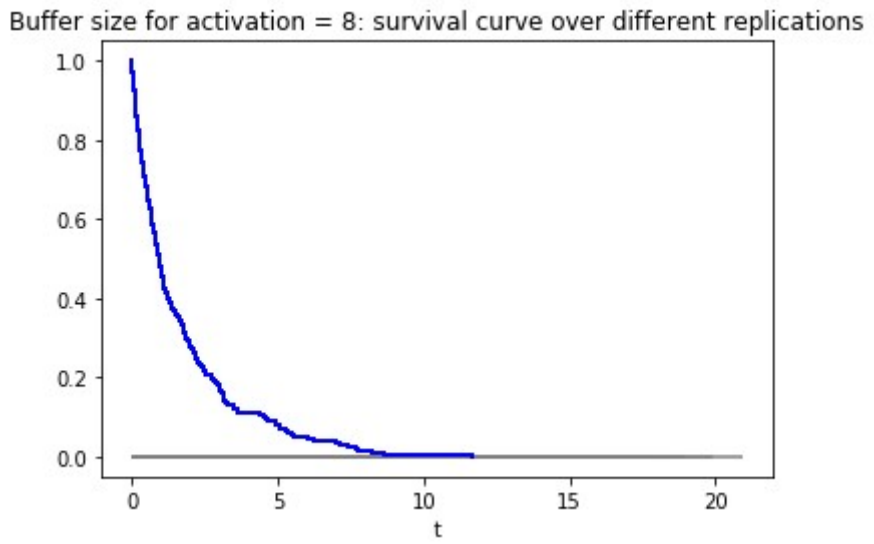
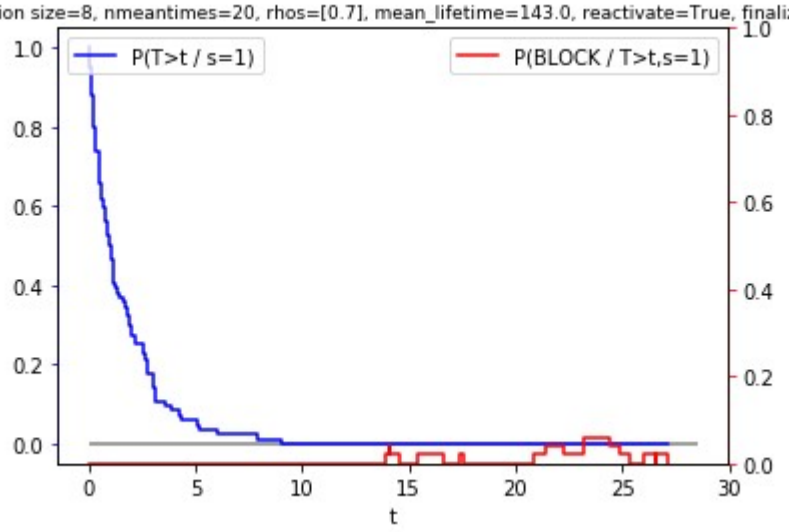
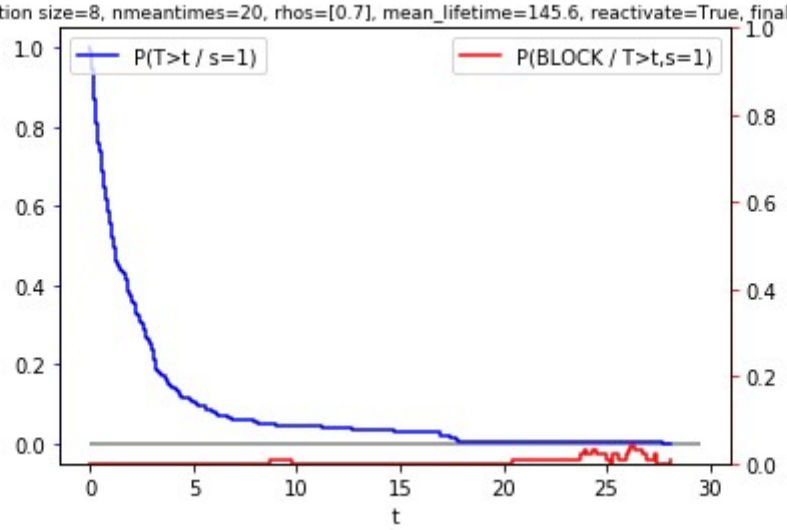




```
In [1]:

In [2]: runfile('E:/Daniel/Projects/PhD-RL-Toulouse/projects/Python/test/test_QB.py', wdir='E:/Daniel/
Projects/PhD-RL-Toulouse/projects/Python/test')
Reloaded modules: Python, Python.lib, Python.lib.environments, Python.lib.environments.queues,
Python.lib.queues, Python.lib.agents, agents, agents.policies.parameterized, Python.lib.utils,
Python.lib.utils.basic, Python.lib.utils.computing
Log file '../../RL-002-QueueBlocking/logs/test_fv_implementation_20210420_101938.log' has been open for
output.
Started at: 2021-04-20 10:19:38
E:\Daniel\Projects\PhD-RL-Toulouse\projects\Python\lib\estimators.py:1062: UserWarning: Particle P=368
has NOT been absorbed and the maximum simulation time (T=1428.2) has been reached...
The expected survival time for this particle is underestimated.
  "\nThe expected survival time for this particle is underestimated.".format(P, survival_times[P]))
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: 2021-04-20 10:59:39
Execution time: 40.0 min, 0.7 hours
```

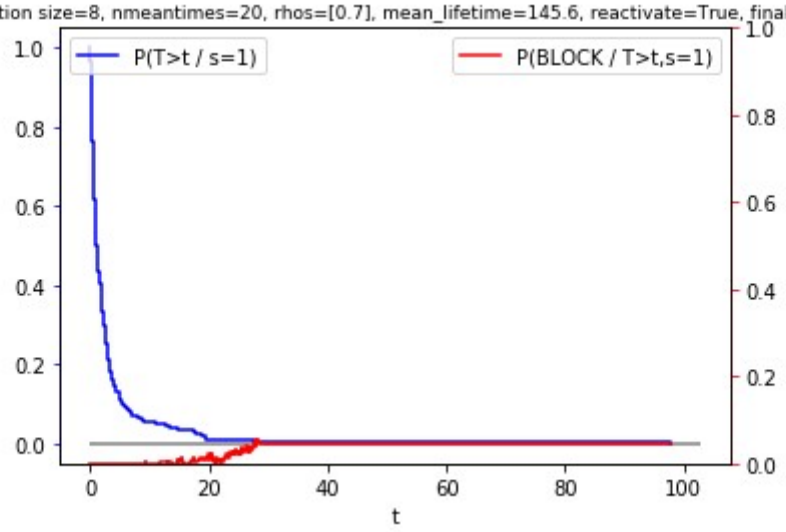
K=20, N=50, activation size=8, nmeantimes=20, rhos=[0.7], mean_lifetime=143.0, reactivate=True, finalize=ABS, seed=1717



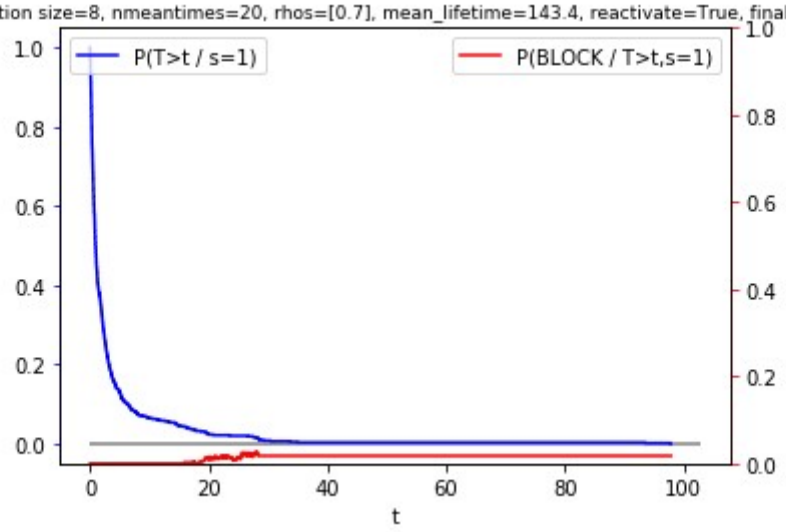
K=20, N=100, activation size=8, nmeantimes=20, rhos=[0.7], mean_lifetime=145.6, reactivate=True, finalize=ABS, seed=1717



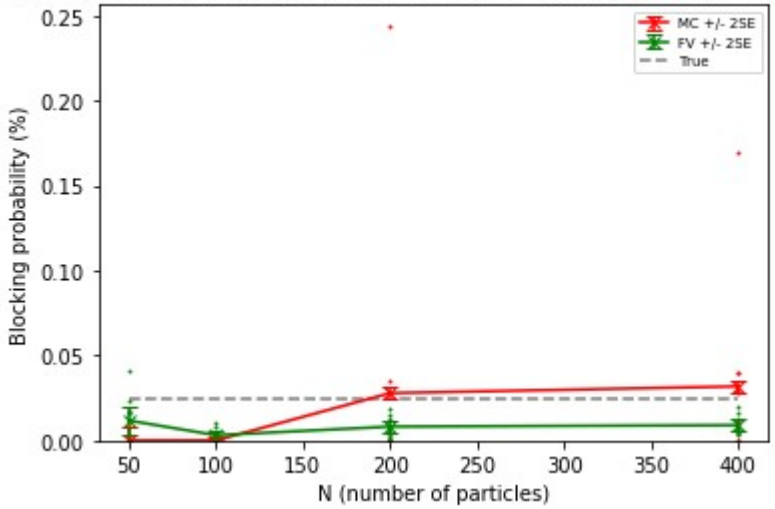
K=20, N=200, activation size=8, nmeantimes=20, rhos=[0.7], mean_lifetime=145.6, reactivate=True, finalize=ABS, seed=1717



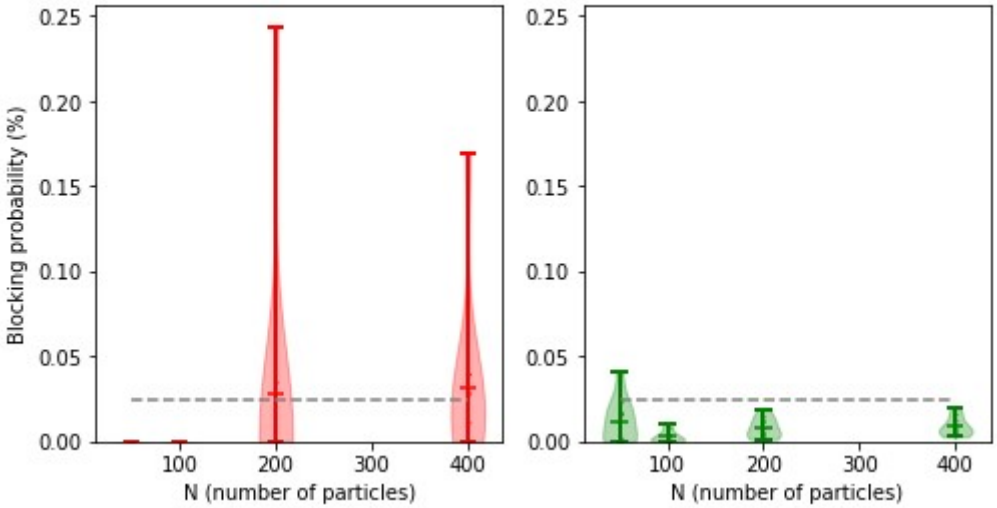
K=20, N=400, activation size=8, nmeantimes=20, rhos=[0.7], mean_lifetime=143.4, reactivate=True, finalize=ABS, seed=1717



Simulation results for #servers=1, K=20, rhos=[0.7], (50<=N<=600), T<=29



Simulation results for #servers=1, K=20, rhos=[0.7], (50<=N<=600), T<=29



In [3]: