```
P(K) estimated by FV2: 10.735% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 4.6 sec
        P(K) by MC: 1.065%, E(T) = 3.8 (simulation time = 3000.0)
        P(K) estimated by FV1: 1.418% (simulation time = 60.0)
        P(K) estimated by FV2: 9.911% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 4.8 sec
        P(K) by MC: 1.389%, E(T) = 4.0 (simulation time = 3000.0)
        P(K) estimated by FV1: 1.243% (simulation time = 60.0)
        P(K) estimated by FV2: 9.062% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 5.0 sec
        P(K) by MC: 1.778%, E(T) = 4.0 (simulation time = 3000.0)
        P(K) estimated by FV1: 1.124% (simulation time = 60.0)
        P(K) estimated by FV2: 8.952% (simulation time = 60.0)
       True P(K): 1.587%
        Replication 10 of 10... execution time: 5.5 sec
        P(K) by MC: 1.755%, E(T) = 3.8 (simulation time = 3000.0)
        P(K) estimated by FV1: 1.243% (simulation time = 60.0)
        P(K) estimated by FV2: 13.106% (simulation time = 60.0)
        True P(K): 1.587%
Running simulation for nparticles=75 on 10 replications (2 of 7)...
        Replication 1 of 10... execution time: 8.4 sec
        P(K) by MC: 1.236%, E(T) = 4.0 (simulation time = 4500.0)
        P(K) estimated by FV1: 0.675% (simulation time = 60.0)
        P(K) estimated by FV2: 5.068% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 2 of 10... execution time: 8.8 sec
        P(K) by MC: 1.434%, E(T) = 3.8 (simulation time = 4500.0)
        P(K) estimated by FV1: 1.374% (simulation time = 60.0)
       P(K) estimated by FV2: 8.113% (simulation time = 60.0)
       True P(K): 1.587%
        Replication 3 of 10... execution time: 7.7 sec
        P(K) by MC: 0.971%, E(T) = 3.8 (simulation time = 4500.0)
        P(K) estimated by FV1: 1.633% (simulation time = 60.0)
        P(K) estimated by FV2: 10.683% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 4 of 10... execution time: 6.8 sec
        P(K) by MC: 1.452%, E(T) = 3.8 (simulation time = 4500.0)
        P(K) estimated by FV1: 1.445% (simulation time = 60.0)
        P(K) estimated by FV2: 7.685% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 7.2 sec
        P(K) by MC: 1.694%, E(T) = 4.0 (simulation time = 4500.0)
        P(K) estimated by FV1: 1.740% (simulation time = 60.0)
        P(K) estimated by FV2: 12.042% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 7.5 sec
        P(K) by MC: 1.611%, E(T) = 3.9 (simulation time = 4500.0)
        P(K) estimated by FV1: 1.785% (simulation time = 60.0)
        P(K) estimated by FV2: 9.820% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 7.0 sec
        P(K) by MC: 1.144%, E(T) = 3.8 (simulation time = 4500.0)
        P(K) estimated by FV1: 2.414% (simulation time = 60.0)
       P(K) estimated by FV2: 8.693% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 7.1 sec
        P(K) by MC: 1.554%, E(T) = 4.0 (simulation time = 4500.0)
        P(K) estimated by FV1: 1.463% (simulation time = 60.0)
        P(K) estimated by FV2: 7.082% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 6.8 sec
        P(K) by MC: 1.786%, E(T) = 4.0 (simulation time = 4500.0)
        P(K) estimated by FV1: 0.955% (simulation time = 60.0)
        P(K) estimated by FV2: 5.122% (simulation time = 60.0)
       True P(K): 1.587%
        Replication 10 of 10... execution time: 6.6 sec
        P(K) by MC: 1.507%, E(T) = 3.8 (simulation time = 4500.0)
        P(K) estimated by FV1: 1.079% (simulation time = 60.0)
        P(K) estimated by FV2: 9.254% (simulation time = 60.0)
        True P(K): 1.587%
```

```
Running simulation for nparticles=112 on 10 replications (3 of 7)...
        Replication 1 of 10... execution time: 10.2 sec
        P(K) by MC: 1.336%, E(T) = 3.9 (simulation time = 6720.0)
       P(K) estimated by FV1: 0.780% (simulation time = 60.0)
        P(K) estimated by FV2: 6.564% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 2 of 10... execution time: 10.0 sec
        P(K) by MC: 1.462%, E(T) = 3.9 (simulation time = 6720.0)
        P(K) estimated by FV1: 1.486% (simulation time = 60.0)
        P(K) estimated by FV2: 13.429% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 3 of 10... execution time: 10.1 sec
        P(K) by MC: 0.937%, E(T) = 3.8 (simulation time = 6720.0)
        P(K) estimated by FV1: 1.082% (simulation time = 60.0)
       P(K) estimated by FV2: 7.712% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 4 of 10... execution time: 10.0 sec
        P(K) by MC: 1.476%, E(T) = 3.9 (simulation time = 6720.0)
        P(K) estimated by FV1: 1.751% (simulation time = 60.0)
        P(K) estimated by FV2: 12.400% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 10.0 sec
        P(K) by MC: 1.510%, E(T) = 3.9 (simulation time = 6720.0)
        P(K) estimated by FV1: 1.669% (simulation time = 60.0)
        P(K) estimated by FV2: 6.430% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 10.4 sec
        P(K) by MC: 1.706%, E(T) = 4.0 (simulation time = 6720.0)
        P(K) estimated by FV1: 1.670% (simulation time = 60.0)
       P(K) estimated by FV2: 11.659% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 11.1 sec
        P(K) by MC: 1.219%, E(T) = 3.8 (simulation time = 6720.0)
        P(K) estimated by FV1: 1.707% (simulation time = 60.0)
        P(K) estimated by FV2: 8.518% (simulation time = 60.0)
       True P(K): 1.587%
        Replication 8 of 10... execution time: 10.2 sec
        P(K) by MC: 1.308%, E(T) = 3.9 (simulation time = 6720.0)
        P(K) estimated by FV1: 1.521% (simulation time = 60.0)
        P(K) estimated by FV2: 8.260% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 10.5 sec
        P(K) by MC: 1.679%, E(T) = 4.0 (simulation time = 6720.0)
        P(K) estimated by FV1: 1.161% (simulation time = 60.0)
        P(K) estimated by FV2: 6.630% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 10.2 sec
        P(K) by MC: 1.378%, E(T) = 3.9 (simulation time = 6720.0)
        P(K) estimated by FV1: 1.434% (simulation time = 60.0)
        P(K) estimated by FV2: 10.181% (simulation time = 60.0)
        True P(K): 1.587%
Running simulation for nparticles=168 on 10 replications (4 of 7)...
        Replication 1 of 10... execution time: 15.8 sec
        P(K) by MC: 1.340%, E(T) = 4.0 (simulation time = 10080.0)
       P(K) estimated by FV1: 1.257% (simulation time = 60.0)
        P(K) estimated by FV2: 7.142% (simulation time = 60.0)
       True P(K): 1.587%
        Replication 2 of 10... execution time: 15.1 sec
        P(K) by MC: 1.405%, E(T) = 3.9 (simulation time = 10080.0)
        P(K) estimated by FV1: 1.294% (simulation time = 60.0)
        P(K) estimated by FV2: 8.239% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 3 of 10... execution time: 15.4 sec
        P(K) by MC: 1.146%, E(T) = 3.8 (simulation time = 10080.0)
        P(K) estimated by FV1: 1.158% (simulation time = 60.0)
        P(K) estimated by FV2: 6.967% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 4 of 10... execution time: 15.5 sec
        P(K) by MC: 1.659%, E(T) = 3.9 (simulation time = 10080.0)
        P(K) estimated by FV1: 1.282% (simulation time = 60.0)
        P(K) estimated by FV2: 8.479% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 16.0 sec
```

```
P(K) by MC: 1.297%, E(T) = 3.8 (simulation time = 10080.0)
        P(K) estimated by FV1: 1.198% (simulation time = 60.0)
        P(K) estimated by FV2: 8.105% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 19.5 sec
        P(K) by MC: 1.700%, E(T) = 4.0 (simulation time = 10080.0)
        P(K) estimated by FV1: 1.837% (simulation time = 60.0)
        P(K) estimated by FV2: 11.328% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 15.5 sec
        P(K) by MC: 1.308%, E(T) = 3.9 (simulation time = 10080.0)
        P(K) estimated by FV1: 1.425% (simulation time = 60.0)
       P(K) estimated by FV2: 8.870% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 15.6 sec
        P(K) by MC: 1.383%, E(T) = 3.9 (simulation time = 10080.0)
        P(K) estimated by FV1: 2.342% (simulation time = 60.0)
        P(K) estimated by FV2: 12.923% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 15.6 sec
        P(K) by MC: 1.443%, E(T) = 3.9 (simulation time = 10080.0)
        P(K) estimated by FV1: 1.922% (simulation time = 60.0)
        P(K) estimated by FV2: 10.020% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 16.1 sec
        P(K) by MC: 1.445%, E(T) = 3.8 (simulation time = 10080.0)
        P(K) estimated by FV1: 2.048% (simulation time = 60.0)
        P(K) estimated by FV2: 10.244% (simulation time = 60.0)
        True P(K): 1.587%
Running simulation for nparticles=252 on 10 replications (5 of 7)...
        Replication 1 of 10... execution time: 24.0 sec
        P(K) by MC: 1.313%, E(T) = 3.9 (simulation time = 15120.0)
        P(K) estimated by FV1: 1.434% (simulation time = 60.0)
        P(K) estimated by FV2: 5.967% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 2 of 10... execution time: 24.9 sec
        P(K) by MC: 1.436%, E(T) = 3.9 (simulation time = 15120.0)
        P(K) estimated by FV1: 1.261% (simulation time = 60.0)
        P(K) estimated by FV2: 8.686% (simulation time = 60.0)
       True P(K): 1.587%
        Replication 3 of 10... execution time: 24.2 sec
        P(K) by MC: 1.264%, E(T) = 3.8 (simulation time = 15120.0)
        P(K) estimated by FV1: 1.194% (simulation time = 60.0)
        P(K) estimated by FV2: 6.781% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 4 of 10... execution time: 24.4 sec
        P(K) by MC: 1.669%, E(T) = 3.9 (simulation time = 15120.0)
        P(K) estimated by FV1: 1.390% (simulation time = 60.0)
        P(K) estimated by FV2: 6.792% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 24.3 sec
        P(K) by MC: 1.441%, E(T) = 3.9 (simulation time = 15120.0)
        P(K) estimated by FV1: 1.292% (simulation time = 60.0)
        P(K) estimated by FV2: 7.817% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 24.2 sec
        P(K) by MC: 1.687%, E(T) = 4.0 (simulation time = 15120.0)
        P(K) estimated by FV1: 1.300% (simulation time = 60.0)
       P(K) estimated by FV2: 10.233% (simulation time = 60.0)
        True P(K): 1.587%
       Replication 7 of 10... execution time: 24.5 sec
        P(K) by MC: 1.437%, E(T) = 3.9 (simulation time = 15120.0)
        P(K) estimated by FV1: 1.268% (simulation time = 60.0)
        P(K) estimated by FV2: 8.803% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 28.2 sec
        P(K) by MC: 1.431%, E(T) = 3.9 (simulation time = 15120.0)
        P(K) estimated by FV1: 1.089% (simulation time = 60.0)
        P(K) estimated by FV2: 7.861% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 24.6 sec
        P(K) by MC: 1.567%, E(T) = 4.0 (simulation time = 15120.0)
        P(K) estimated by FV1: 1.403% (simulation time = 60.0)
```

```
P(K) estimated by FV2: 8.597% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 24.2 sec
        P(K) by MC: 1.451%, E(T) = 3.9 (simulation time = 15120.0)
        P(K) estimated by FV1: 1.380% (simulation time = 60.0)
        P(K) estimated by FV2: 9.687% (simulation time = 60.0)
        True P(K): 1.587%
Running simulation for nparticles=378 on 10 replications (6 of 7)...
        Replication 1 of 10... execution time: 39.1 sec
        P(K) by MC: 1.393%, E(T) = 3.9 (simulation time = 22680.0)
        P(K) estimated by FV1: 1.250% (simulation time = 60.0)
        P(K) estimated by FV2: 7.088% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 2 of 10... execution time: 35.8 sec
        P(K) by MC: 1.497%, E(T) = 3.9 (simulation time = 22680.0)
        P(K) estimated by FV1: 1.294% (simulation time = 60.0)
        P(K) estimated by FV2: 8.362% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 3 of 10... execution time: 35.7 sec
        P(K) by MC: 1.281%, E(T) = 3.9 (simulation time = 22680.0)
        P(K) estimated by FV1: 1.284% (simulation time = 60.0)
        P(K) estimated by FV2: 7.965% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 4 of 10... execution time: 35.6 sec
        P(K) by MC: 1.704%, E(T) = 3.8 (simulation time = 22680.0)
        P(K) estimated by FV1: 1.394% (simulation time = 60.0)
        P(K) estimated by FV2: 10.146% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 38.1 sec
        P(K) by MC: 1.533%, E(T) = 3.9 (simulation time = 22680.0)
        P(K) estimated by FV1: 1.191% (simulation time = 60.0)
       P(K) estimated by FV2: 7.863% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 35.2 sec
        P(K) by MC: 1.785%, E(T) = 4.0 (simulation time = 22680.0)
       P(K) estimated by FV1: 1.419% (simulation time = 60.0)
        P(K) estimated by FV2: 9.442% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 35.7 sec
        P(K) by MC: 1.483%, E(T) = 3.9 (simulation time = 22680.0)
        P(K) estimated by FV1: 1.170% (simulation time = 60.0)
        P(K) estimated by FV2: 7.502% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 35.5 sec
        P(K) by MC: 1.406%, E(T) = 3.9 (simulation time = 22680.0)
        P(K) estimated by FV1: 1.180% (simulation time = 60.0)
        P(K) estimated by FV2: 7.875% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 35.8 sec
        P(K) by MC: 1.660%, E(T) = 4.0 (simulation time = 22680.0)
        P(K) estimated by FV1: 1.352% (simulation time = 60.0)
        P(K) estimated by FV2: 9.515% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 35.8 sec
        P(K) by MC: 1.506%, E(T) = 4.0 (simulation time = 22680.0)
        P(K) estimated by FV1: 1.437% (simulation time = 60.0)
        P(K) estimated by FV2: 7.958% (simulation time = 60.0)
        True P(K): 1.587%
Running simulation for nparticles=567 on 10 replications (7 of 7)...
        Replication 1 of 10... execution time: 59.3 sec
        P(K) by MC: 1.399%, E(T) = 3.9 (simulation time = 34020.0)
        P(K) estimated by FV1: 1.438% (simulation time = 60.0)
        P(K) estimated by FV2: 10.156% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 2 of 10... execution time: 58.0 sec
        P(K) by MC: 1.607%, E(T) = 4.0 (simulation time = 34020.0)
        P(K) estimated by FV1: 1.266% (simulation time = 60.0)
        P(K) estimated by FV2: 8.550% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 3 of 10... execution time: 58.9 sec
        P(K) by MC: 1.416%, E(T) = 3.9 (simulation time = 34020.0)
        P(K) estimated by FV1: 0.988% (simulation time = 60.0)
        P(K) estimated by FV2: 8.193% (simulation time = 60.0)
```

```
True P(K): 1.587%
        Replication 4 of 10... execution time: 58.8 sec
        P(K) by MC: 1.570%, E(T) = 3.9 (simulation time = 34020.0)
        P(K) estimated by FV1: 1.190% (simulation time = 60.0)
        P(K) estimated by FV2: 9.490% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 58.8 sec
        P(K) by MC: 1.513%, E(T) = 4.0 (simulation time = 34020.0)
        P(K) estimated by FV1: 1.314% (simulation time = 60.0)
        P(K) estimated by FV2: 7.462% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 58.2 sec
        P(K) by MC: 1.757%, E(T) = 4.0 (simulation time = 34020.0)
        P(K) estimated by FV1: 1.610% (simulation time = 60.0)
        P(K) estimated by FV2: 10.024% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 58.8 sec
        P(K) by MC: 1.470%, E(T) = 3.9 (simulation time = 34020.0)
        P(K) estimated by FV1: 1.590% (simulation time = 60.0)
        P(K) estimated by FV2: 9.447% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 57.9 sec
        P(K) by MC: 1.569%, E(T) = 4.0 (simulation time = 34020.0)
        P(K) estimated by FV1: 1.242% (simulation time = 60.0)
        P(K) estimated by FV2: 8.914% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 57.9 sec
        P(K) by MC: 1.597%, E(T) = 4.0 (simulation time = 34020.0)
        P(K) estimated by FV1: 1.147% (simulation time = 60.0)
        P(K) estimated by FV2: 8.848% (simulation time = 60.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 59.8 sec
        P(K) by MC: 1.596%, E(T) = 4.0 (simulation time = 34020.0)
        P(K) estimated by FV1: 1.577% (simulation time = 60.0)
        P(K) estimated by FV2: 8.281% (simulation time = 60.0)
        True P(K): 1.587%
Total execution time: 26.3 min
Simulation results for c=1, K=5, rhos=[0.5], (50 <= N <= 600), T<=60
Raw results by N:
                      Pr(MC) Time(MC)
     N replication
                                            F(T)
                                                    Pr(FV) Time(FV)
                 1
                    0.011207
                                3000.0 4.120879
                                                  0.012645
                                                                60.0
1
    50
                 2 0.015780
                                 3000.0 3.773585
                                                  0.007087
                                                                60.0
1
    50
                 3 0.009346
                                3000.0 3.710318 0.020932
                                                                60.0
1
                 4 0.013506
                                3000.0 3.750000 0.015927
                                                                60.0
    50
                                 3000.0 4.126245 0.015597
     50
                 5 0.016546
                                                                60.0
1
    50
                 6
                    0.016846
                                3000.0 3.865979 0.009605
                                                                60.0
                                3000.0 3.807107 0.014182
    50
                    0.010652
                                                                60.0
1
    50
                 8 0.013888
                                3000.0 3.978780 0.012430
                                                                60.0
    50
                 9 0.017780
                                3000.0 4.030907 0.011242
                                                                60.0
                10
     50
                    0.017549
                                3000.0 3.836317
                                                  0.012427
                                                                60.0
                                4500.0 3.963080 0.006748
    75
                 1 0.012358
                                                                60.0
2
                                4500.0 3.826213 0.013737
     75
                 2 0.014336
                                                                60.0
                 3 0.009706
                                4500.0 3.778338 0.016326
                                                                60.0
    75
2
     75
                 4
                    0.014520
                                4500.0 3.772658
                                                  0.014450
                                                                60.0
                                4500.0 3.975265 0.017397
                 5 0.016935
    75
                                                                60.0
2
                 6 0.016109
                                4500.0 3.900881 0.017854
                                                                60.0
    75
                                4500.0 3.794266 0.024141
    75
                 7
                    0.011440
                                                                60.0
    75
                 8
                    0.015537
                                4500.0 3.982301 0.014632
                                                                60.0
                                4500.0 3.963502 0.009546
    75
                 9 0.017862
                                                                60.0
    75
                10 0.015069
                                4500.0 3.842844 0.010786
                                                                60.0
3
    112
                 1 0.013360
                                6720.0 3.942869 0.007800
                                                                60.0
                                6720.0 3.855702 0.014858
    112
                 2 0.014619
                                                                60.0
3
                 3 0.009368
                                6720.0 3.785046 0.010824
                                                                60.0
   112
   112
                 4 0.014764
                                6720.0 3.882923 0.017510
                                                                60.0
3
    112
                 5
                    0.015098
                                6720.0 3.904707
                                                  0.016694
                                                                60.0
                                6720.0 3.950617 0.016700
    112
                 6
                    0.017058
                                                                60.0
                                6720.0 3.832336 0.017068
3
    112
                    0.012185
                                                                60.0
                 8 0.013083
                                6720.0 3.925234 0.015213
                                                                60.0
3
   112
                 9
                    0.016790
                                6720.0 3.956799 0.011611
    112
                                                                60.0
                                6720.0 3.850352 0.014340
3
                10 0.013776
   112
                                                                60.0
                . . .
                                   . . .
                 1 0.013127
                               15120.0 3.934081 0.014339
                                                                60.0
5
   252
   252
                 2
                    0.014359
                               15120.0 3.910375 0.012614
                                                                60.0
```

1

1

1

1

1

2

2

2

2

2

2

2

3

3

3

```
5
    252
                  3 0.012645
                                15120.0 3.840392 0.011936
                                                                  60.0
5
    252
                     0.016686
                                15120.0 3.883269
                                                   0.013903
                                                                 60.0
5
                     0.014406
                                                   0.012918
                                                                  60.0
    252
                  5
                                15120.0 3.893602
5
                                         3.976523
    252
                  6
                     0.016867
                                15120.0
                                                   0.012997
                                                                  60.0
5
                                                                 60.0
    252
                     0.014365
                                15120.0
                                        3.882897
                                                   0.012684
5
                                15120.0 3.945629
    252
                     0.014312
                                                   0.010887
                                                                  60.0
5
                                15120.0 3.999106 0.014032
                  9
                     0.015672
                                                                  60.0
    252
5
                 10
                     0.014511
                                15120.0
                                         3.924215
                                                   0.013795
                                                                  60.0
    252
6
    378
                 1
                     0.013932
                                22680.0
                                        3.914805
                                                   0.012502
                                                                 60.0
    378
                     0.014968
                                22680.0
                                        3.929314
                                                                 60.0
6
                                                   0.012936
                                                                 60.0
6
    378
                  3
                     0.012811
                                22680.0
                                        3.869647
                                                   0.012840
    378
                  4
                     0.017038
                                22680.0
                                         3.849287
                                                   0.013945
                                                                 60.0
6
    378
                  5
                     0.015331
                                22680.0 3.921162 0.011910
                                                                 60.0
6
    378
                     0.017845
                                22680.0 3.972675
                                                   0.014190
                                                                  60.0
6
                     0.014833
                                22680.0 3.904927
                                                   0.011700
                                                                  60.0
6
    378
                  7
6
    378
                  8
                     0.014060
                                22680.0
                                        3.937117
                                                   0.011800
                                                                 60.0
    378
                 9
                     0.016600
                                22680.0 3.953397
                                                   0.013518
                                                                 60.0
6
6
    378
                 10
                     0.015058
                                22680.0 3.969198
                                                   0.014374
                                                                  60.0
7
    567
                     0.013991
                                34020.0
                                         3.905855
                                                   0.014379
                                                                 60.0
                 1
7
    567
                  2
                     0.016068
                                34020.0
                                        3.975708
                                                   0.012657
                                                                 60.0
7
    567
                  3
                     0.014158
                                34020.0 3.907201
                                                   0.009884
                                                                 60.0
                                                   0.011895
7
                     0.015705
                                34020.0 3.861736
    567
                  4
                                                                  60.0
7
    567
                  5
                     0.015125
                                34020.0
                                         3.968735
                                                   0.013137
                                                                  60.0
7
                                                                 60.0
    567
                  6
                     0.017566
                                34020.0
                                        3.962156
                                                   0.016100
7
    567
                     0.014699
                                34020.0 3.892894
                                                   0.015895
                                                                 60.0
7
    567
                  8 0.015687
                                34020.0
                                        3.974299
                                                   0.012416
                                                                 60.0
7
                  9
                                34020.0
                                         3.953056
                                                   0.011468
    567
                     0.015975
                                                                  60.0
7
                 10 0.015960
                                34020.0 3.953130 0.015772
                                                                 60.0
    567
```

Pr(K) exec_time(s) 1 0.015873 4.107369 0.015873 5.847250 1 0.015873 3.939480 1 0.015873 3.801719 1 0.015873 3.970213 1 1 0.015873 4.289760 1 0.015873 4.631887 0.015873 4.788486 1 1 0.015873 4.972079 0.015873 5.454322 1 2 0.015873 8.395237 2 0.015873 8.791584 2 0.015873 7.731077 2 0.015873 6.766460 7.246632 2 0.015873 2 0.015873 7.461896 2 0.015873 7.019166 2 0.015873 7.147553 2 0.015873 6.844154 0.015873 6.645629 3 0.015873 10.201254 3 0.015873 10.029331 0.015873 10.139524 3 3 0.015873 9.995961 0.015873 9.986342 3 3 0.015873 10.410965 0.015873 11.125293 3 3 0.015873 10.249023 3 0.015873 10.453531 3 0.015873 10.191868 5 0.015873 23.967090 5 0.015873 24.945367 5 0.015873 24.238432 5 0.015873 24.366525 5 0.015873 24.307973 5 0.015873 24.173603 5 0.015873 24.464266 0.015873 28.216626 5 5 0.015873 24.644318 0.015873 24.161450 0.015873 39.110061 6 6 0.015873 35.750276

```
6
    0.015873
                 35.730498
    0.015873
                 35.588417
6
6
    0.015873
                 38.119551
6
    0.015873
                 35.216650
                 35.684341
    0.015873
6
    0.015873
                 35.507010
    0.015873
                 35.764144
6
6
    0.015873
                 35.844710
                 59.278453
    0.015873
    0.015873
                 58.020798
    0.015873
                 58.904554
    0.015873
                 58.802470
    0.015873
                 58.818785
7
    0.015873
                 58.187670
    0.015873
                 58.805595
    0.015873
                 57.872662
                 57.890389
    0.015873
                 59.770933
    0.015873
```

[70 rows x 9 columns]

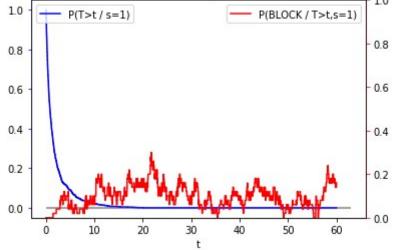
Aggregated results by N:

-	_		•						
	n		mean		std		min		\
	Pr(MC)	Pr(FV)	Pr(MC)	Pr(FV)	Pr(MC)	Pr(FV)	Pr(MC)	Pr(FV)	
0	10	10	0.014310	0.013207	0.003066	0.003794	0.009346	0.007087	
5	10	10	0.014387	0.014562	0.002540	0.004887	0.009706	0.006748	
12	10	10	0.014010	0.014262	0.002245	0.003200	0.009368	0.007800	
68	10	10	0.014127	0.015763	0.001657	0.004224	0.011458	0.011577	
52	10	10	0.014695	0.013011	0.001365	0.001063	0.012645	0.010887	
78	10	10	0.015248	0.012971	0.001533	0.001003	0.012811	0.011700	
67	10	10	0.015493	0.013360	0.001052	0.002109	0.013991	0.009884	
	0 5 12 68 52 78	Pr(MC) 0 10 5 10 12 10 68 10 52 10 78 10	Pr(MC) Pr(FV) 0 10 10 5 10 10 12 10 10 68 10 10 52 10 10 78 10 10	Pr(MC) Pr(FV) Pr(MC) 0 10 10 0.014310 5 10 10 0.014387 12 10 10 0.014010 68 10 10 0.014127 52 10 10 0.014695 78 10 10 0.015248	Pr(MC) Pr(FV) Pr(MC) Pr(FV) 0 10 10 0.014310 0.013207 5 10 10 0.014387 0.014562 12 10 10 0.014010 0.014262 68 10 10 0.014127 0.015763 52 10 10 0.014695 0.013011 78 10 10 0.015248 0.012971	Pr(MC) Pr(FV) Pr(MC) Pr(FV) Pr(MC) 0 10 10 0.014310 0.013207 0.003066 5 10 10 0.014387 0.014562 0.002540 12 10 10 0.014010 0.014262 0.002245 68 10 10 0.014127 0.015763 0.001657 52 10 10 0.014695 0.013011 0.001365 78 10 10 0.015248 0.012971 0.001533	Pr(MC) Pr(FV) Pr(MC) Pr(FV) Pr(MC) Pr(FV) 0 10 10 0.014310 0.013207 0.003066 0.003794 5 10 10 0.014387 0.014562 0.002540 0.004887 12 10 10 0.014010 0.014262 0.002245 0.003200 68 10 10 0.014127 0.015763 0.001657 0.004224 52 10 10 0.014695 0.013011 0.001365 0.001063 78 10 10 0.015248 0.012971 0.001533 0.001003	Pr(MC) Pr(FV) Pr(FV) Pr(MC) Pr(FV) 0.0093468 0.009468 0.009468	Pr(MC) Pr(FV) Pr(FV) Pr(MC) Pr(FV) 0.007687 0.009348 0.009346 0

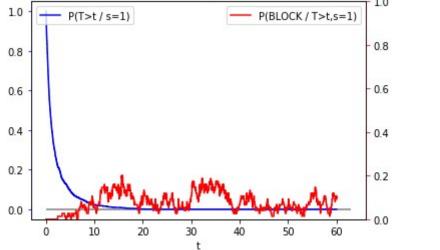
	max		SE	
	Pr(MC)	Pr(FV)	Pr(MC)	Pr(FV)
N				
50	0.017780	0.020932	0.000969	0.001200
75	0.017862	0.024141	0.000803	0.001545
112	0.017058	0.017510	0.000710	0.001012
168	0.017005	0.023418	0.000524	0.001336
252	0.016867	0.014339	0.000432	0.000336
378	0.017845	0.014374	0.000485	0.000317
567	0.017566	0.016100	0.000333	0.000667

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)

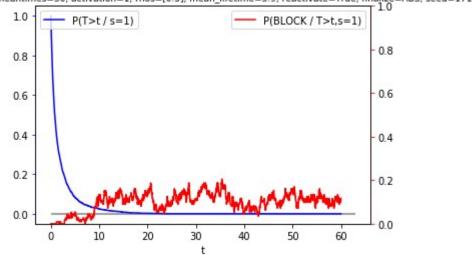




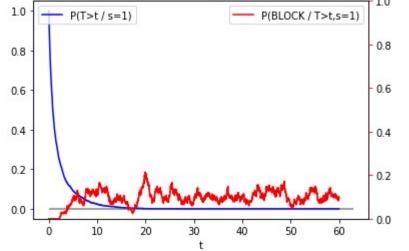
K=5, N=75, nmeantimes=30, activation=1, rhos=[0.5], mean_lifetime=4.0, reactivate=True, finalize=ABS, seed=1717



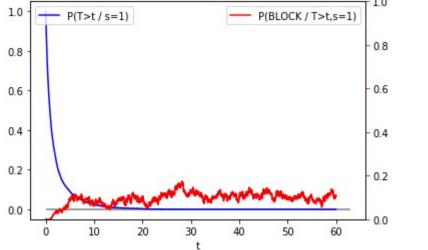
K=5, N=112, nmeantimes=30, activation=1, rhos=[0.5], mean_lifetime=3.9, reactivate=True, finalize=ABS, seed=1717



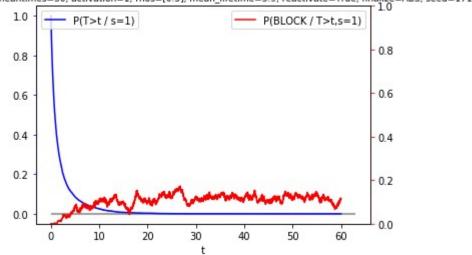
K=5, N=168, nmeantimes=30, activation=1, rhos=[0.5], mean_lifetime=4.0, reactivate=True, finalize=ABS, seed=1717



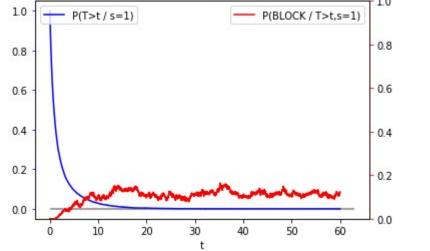
K=5, N=252, nmeantimes=30, activation=1, rhos=[0.5], mean_lifetime=3.9, reactivate=True, finalize=ABS, seed=1717

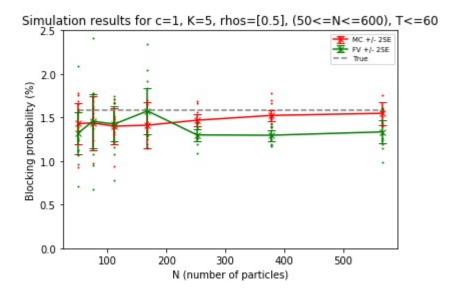


K=5, N=378, nmeantimes=30, activation=1, rhos=[0.5], mean_lifetime=3.9, reactivate=True, finalize=ABS, seed=1717



K=5, N=567, nmeantimes=30, activation=1, rhos=[0.5], mean_lifetime=3.9, reactivate=True, finalize=ABS, seed=1717





In [603]: