```
P(K) estimated by FV2: 0.388% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 1.4 sec
        P(K) by MC: 1.202%, E(T) = 3.7 (simulation time = 1000.0)
        P(K) estimated by FV1: 0.772% (simulation time = 20.0)
        P(K) estimated by FV2: 3.160% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 1.3 sec
        P(K) by MC: 2.468%, E(T) = 4.1 (simulation time = 1000.0)
        P(K) estimated by FV1: 0.755% (simulation time = 20.0)
        P(K) estimated by FV2: 2.728% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 1.3 sec
        P(K) by MC: 1.983%, E(T) = 4.0 (simulation time = 1000.0)
        P(K) estimated by FV1: 0.666% (simulation time = 20.0)
        P(K) estimated by FV2: 2.676% (simulation time = 20.0)
       True P(K): 1.587%
        Replication 10 of 10... execution time: 1.4 sec
        P(K) by MC: 2.294%, E(T) = 4.0 (simulation time = 1000.0)
        P(K) estimated by FV1: 1.580% (simulation time = 20.0)
        P(K) estimated by FV2: 4.073% (simulation time = 20.0)
        True P(K): 1.587%
Running simulation for nparticles=75 on 10 replications (2 of 7)...
        Replication 1 of 10... execution time: 2.2 sec
        P(K) by MC: 1.232%, E(T) = 4.1 (simulation time = 1500.0)
        P(K) estimated by FV1: 0.408% (simulation time = 20.0)
        P(K) estimated by FV2: 0.912% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 2 of 10... execution time: 2.2 sec
        P(K) by MC: 1.898%, E(T) = 3.8 (simulation time = 1500.0)
        P(K) estimated by FV1: 0.911% (simulation time = 20.0)
       P(K) estimated by FV2: 4.540% (simulation time = 20.0)
       True P(K): 1.587%
        Replication 3 of 10... execution time: 2.0 sec
        P(K) by MC: 0.807%, E(T) = 3.6 (simulation time = 1500.0)
        P(K) estimated by FV1: 1.532% (simulation time = 20.0)
        P(K) estimated by FV2: 3.662% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 4 of 10... execution time: 2.0 sec
        P(K) by MC: 1.677%, E(T) = 4.0 (simulation time = 1500.0)
        P(K) estimated by FV1: 0.743% (simulation time = 20.0)
        P(K) estimated by FV2: 2.160% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 2.2 sec
        P(K) by MC: 1.568%, E(T) = 4.2 (simulation time = 1500.0)
        P(K) estimated by FV1: 1.048% (simulation time = 20.0)
        P(K) estimated by FV2: 3.712% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 2.2 sec
        P(K) by MC: 1.739%, E(T) = 3.8 (simulation time = 1500.0)
        P(K) estimated by FV1: 0.700% (simulation time = 20.0)
        P(K) estimated by FV2: 2.056% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 2.1 sec
        P(K) by MC: 0.938%, E(T) = 3.8 (simulation time = 1500.0)
        P(K) estimated by FV1: 2.196% (simulation time = 20.0)
       P(K) estimated by FV2: 8.084% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 2.2 sec
        P(K) by MC: 1.880%, E(T) = 4.2 (simulation time = 1500.0)
        P(K) estimated by FV1: 1.011% (simulation time = 20.0)
        P(K) estimated by FV2: 4.182% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 2.8 sec
        P(K) by MC: 1.938%, E(T) = 3.9 (simulation time = 1500.0)
        P(K) estimated by FV1: 0.647% (simulation time = 20.0)
        P(K) estimated by FV2: 2.384% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 2.3 sec
        P(K) by MC: 1.715%, E(T) = 3.8 (simulation time = 1500.0)
        P(K) estimated by FV1: 1.123% (simulation time = 20.0)
        P(K) estimated by FV2: 4.590% (simulation time = 20.0)
        True P(K): 1.587%
```

```
Running simulation for nparticles=112 on 10 replications (3 of 7)...
        Replication 1 of 10... execution time: 3.4 sec
        P(K) by MC: 1.261%, E(T) = 4.2 (simulation time = 2240.0)
        P(K) estimated by FV1: 0.518% (simulation time = 20.0)
        P(K) estimated by FV2: 2.538% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 2 of 10... execution time: 3.4 sec
        P(K) by MC: 1.790%, E(T) = 3.8 (simulation time = 2240.0)
        P(K) estimated by FV1: 1.093% (simulation time = 20.0)
        P(K) estimated by FV2: 4.961% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 3 of 10... execution time: 3.9 sec
        P(K) by MC: 0.761%, E(T) = 3.7 (simulation time = 2240.0)
        P(K) estimated by FV1: 0.979% (simulation time = 20.0)
       P(K) estimated by FV2: 2.427% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 4 of 10... execution time: 3.2 sec
        P(K) by MC: 1.542%, E(T) = 3.9 (simulation time = 2240.0)
        P(K) estimated by FV1: 0.908% (simulation time = 20.0)
        P(K) estimated by FV2: 3.382% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 3.3 sec
        P(K) by MC: 1.909%, E(T) = 4.1 (simulation time = 2240.0)
        P(K) estimated by FV1: 1.370% (simulation time = 20.0)
        P(K) estimated by FV2: 4.847% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 3.3 sec
        P(K) by MC: 1.488%, E(T) = 3.9 (simulation time = 2240.0)
        P(K) estimated by FV1: 1.607% (simulation time = 20.0)
       P(K) estimated by FV2: 5.147% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 3.4 sec
        P(K) by MC: 0.730%, E(T) = 3.8 (simulation time = 2240.0)
        P(K) estimated by FV1: 0.706% (simulation time = 20.0)
        P(K) estimated by FV2: 3.347% (simulation time = 20.0)
       True P(K): 1.587%
        Replication 8 of 10... execution time: 3.5 sec
        P(K) by MC: 1.479%, E(T) = 4.0 (simulation time = 2240.0)
        P(K) estimated by FV1: 0.908% (simulation time = 20.0)
        P(K) estimated by FV2: 3.464% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 3.9 sec
        P(K) by MC: 1.704%, E(T) = 4.1 (simulation time = 2240.0)
        P(K) estimated by FV1: 0.766% (simulation time = 20.0)
        P(K) estimated by FV2: 3.070% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 5.9 sec
        P(K) by MC: 1.742%, E(T) = 3.9 (simulation time = 2240.0)
        P(K) estimated by FV1: 0.958% (simulation time = 20.0)
        P(K) estimated by FV2: 2.745% (simulation time = 20.0)
        True P(K): 1.587%
Running simulation for nparticles=168 on 10 replications (4 of 7)...
        Replication 1 of 10... execution time: 5.3 sec
        P(K) by MC: 1.159%, E(T) = 4.1 (simulation time = 3360.0)
        P(K) estimated by FV1: 0.727% (simulation time = 20.0)
        P(K) estimated by FV2: 2.200% (simulation time = 20.0)
       True P(K): 1.587%
        Replication 2 of 10... execution time: 5.4 sec
        P(K) by MC: 1.698%, E(T) = 3.8 (simulation time = 3360.0)
        P(K) estimated by FV1: 0.751% (simulation time = 20.0)
        P(K) estimated by FV2: 3.314% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 3 of 10... execution time: 5.2 sec
        P(K) by MC: 0.852%, E(T) = 3.7 (simulation time = 3360.0)
        P(K) estimated by FV1: 1.069% (simulation time = 20.0)
        P(K) estimated by FV2: 2.499% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 4 of 10... execution time: 5.7 sec
        P(K) by MC: 1.412%, E(T) = 3.8 (simulation time = 3360.0)
        P(K) estimated by FV1: 1.031% (simulation time = 20.0)
        P(K) estimated by FV2: 4.385% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 5.4 sec
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P(K) by MC: 1.698%, E(T) = 4.1 (simulation time = 3360.0)
        P(K) estimated by FV1: 0.623% (simulation time = 20.0)
        P(K) estimated by FV2: 3.492% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 5.9 sec
        P(K) by MC: 1.737%, E(T) = 3.9 (simulation time = 3360.0)
        P(K) estimated by FV1: 0.781% (simulation time = 20.0)
        P(K) estimated by FV2: 2.579% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 6.6 sec
        P(K) by MC: 1.139%, E(T) = 3.8 (simulation time = 3360.0)
        P(K) estimated by FV1: 1.012% (simulation time = 20.0)
       P(K) estimated by FV2: 4.966% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 5.8 sec
        P(K) by MC: 1.543%, E(T) = 4.0 (simulation time = 3360.0)
        P(K) estimated by FV1: 1.020% (simulation time = 20.0)
        P(K) estimated by FV2: 3.772% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 5.8 sec
        P(K) by MC: 1.694%, E(T) = 4.0 (simulation time = 3360.0)
        P(K) estimated by FV1: 0.717% (simulation time = 20.0)
        P(K) estimated by FV2: 2.357% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 7.5 sec
        P(K) by MC: 1.580%, E(T) = 3.9 (simulation time = 3360.0)
        P(K) estimated by FV1: 1.249% (simulation time = 20.0)
        P(K) estimated by FV2: 5.010% (simulation time = 20.0)
        True P(K): 1.587%
Running simulation for nparticles=252 on 10 replications (5 of 7)...
        Replication 1 of 10... execution time: 9.2 sec
        P(K) by MC: 1.120%, E(T) = 4.0 (simulation time = 5040.0)
        P(K) estimated by FV1: 0.821% (simulation time = 20.0)
        P(K) estimated by FV2: 2.642% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 2 of 10... execution time: 17.3 sec
        P(K) by MC: 1.361%, E(T) = 3.9 (simulation time = 5040.0)
        P(K) estimated by FV1: 0.886% (simulation time = 20.0)
        P(K) estimated by FV2: 4.011% (simulation time = 20.0)
       True P(K): 1.587%
        Replication 3 of 10... execution time: 11.3 sec
        P(K) by MC: 0.985%, E(T) = 3.8 (simulation time = 5040.0)
        P(K) estimated by FV1: 0.918% (simulation time = 20.0)
        P(K) estimated by FV2: 2.838% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 4 of 10... execution time: 9.0 sec
        P(K) by MC: 1.471%, E(T) = 3.8 (simulation time = 5040.0)
        P(K) estimated by FV1: 0.725% (simulation time = 20.0)
        P(K) estimated by FV2: 2.639% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 13.7 sec
        P(K) by MC: 1.598%, E(T) = 3.9 (simulation time = 5040.0)
        P(K) estimated by FV1: 0.938% (simulation time = 20.0)
        P(K) estimated by FV2: 2.646% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 10.0 sec
        P(K) by MC: 1.635%, E(T) = 4.0 (simulation time = 5040.0)
        P(K) estimated by FV1: 0.606% (simulation time = 20.0)
        P(K) estimated by FV2: 1.573% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 9.4 sec
        P(K) by MC: 1.185%, E(T) = 3.8 (simulation time = 5040.0)
        P(K) estimated by FV1: 0.602% (simulation time = 20.0)
        P(K) estimated by FV2: 2.450% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 10.2 sec
        P(K) by MC: 1.491%, E(T) = 4.0 (simulation time = 5040.0)
        P(K) estimated by FV1: 0.754% (simulation time = 20.0)
        P(K) estimated by FV2: 2.901% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 9.1 sec
        P(K) by MC: 1.754%, E(T) = 4.0 (simulation time = 5040.0)
        P(K) estimated by FV1: 0.655% (simulation time = 20.0)
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P(K) estimated by FV2: 1.967% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 7.9 sec
        P(K) by MC: 1.415%, E(T) = 3.8 (simulation time = 5040.0)
        P(K) estimated by FV1: 1.179% (simulation time = 20.0)
        P(K) estimated by FV2: 4.087% (simulation time = 20.0)
        True P(K): 1.587%
Running simulation for nparticles=378 on 10 replications (6 of 7)...
        Replication 1 of 10... execution time: 12.0 sec
        P(K) by MC: 1.386%, E(T) = 4.0 (simulation time = 7560.0)
        P(K) estimated by FV1: 0.668% (simulation time = 20.0)
        P(K) estimated by FV2: 2.371% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 2 of 10... execution time: 15.0 sec
        P(K) by MC: 1.432%, E(T) = 3.9 (simulation time = 7560.0)
        P(K) estimated by FV1: 1.120% (simulation time = 20.0)
        P(K) estimated by FV2: 4.226% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 3 of 10... execution time: 11.9 sec
        P(K) by MC: 1.023%, E(T) = 3.8 (simulation time = 7560.0)
        P(K) estimated by FV1: 0.675% (simulation time = 20.0)
        P(K) estimated by FV2: 1.829% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 4 of 10... execution time: 12.7 sec
        P(K) by MC: 1.449%, E(T) = 3.9 (simulation time = 7560.0)
        P(K) estimated by FV1: 0.841% (simulation time = 20.0)
        P(K) estimated by FV2: 3.311% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 12.7 sec
        P(K) by MC: 1.416%, E(T) = 3.9 (simulation time = 7560.0)
        P(K) estimated by FV1: 0.729% (simulation time = 20.0)
       P(K) estimated by FV2: 2.914% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 14.2 sec
        P(K) by MC: 1.760%, E(T) = 3.9 (simulation time = 7560.0)
       P(K) estimated by FV1: 0.791% (simulation time = 20.0)
        P(K) estimated by FV2: 2.956% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 16.4 sec
        P(K) by MC: 1.144%, E(T) = 3.8 (simulation time = 7560.0)
        P(K) estimated by FV1: 0.887% (simulation time = 20.0)
        P(K) estimated by FV2: 4.069% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 14.3 sec
        P(K) by MC: 1.249%, E(T) = 3.9 (simulation time = 7560.0)
        P(K) estimated by FV1: 1.001% (simulation time = 20.0)
        P(K) estimated by FV2: 3.758% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 13.8 sec
        P(K) by MC: 1.566%, E(T) = 4.0 (simulation time = 7560.0)
        P(K) estimated by FV1: 0.970% (simulation time = 20.0)
        P(K) estimated by FV2: 3.741% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 16.7 sec
        P(K) by MC: 1.369%, E(T) = 3.9 (simulation time = 7560.0)
        P(K) estimated by FV1: 1.374% (simulation time = 20.0)
        P(K) estimated by FV2: 4.330% (simulation time = 20.0)
        True P(K): 1.587%
Running simulation for nparticles=567 on 10 replications (7 of 7)...
        Replication 1 of 10... execution time: 22.0 sec
        P(K) by MC: 1.339%, E(T) = 4.0 (simulation time = 11340.0)
        P(K) estimated by FV1: 0.711% (simulation time = 20.0)
        P(K) estimated by FV2: 2.419% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 2 of 10... execution time: 19.8 sec
        P(K) by MC: 1.486%, E(T) = 4.0 (simulation time = 11340.0)
        P(K) estimated by FV1: 0.917% (simulation time = 20.0)
        P(K) estimated by FV2: 2.684% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 3 of 10... execution time: 18.2 sec
        P(K) by MC: 1.137%, E(T) = 3.8 (simulation time = 11340.0)
       P(K) estimated by FV1: 0.717% (simulation time = 20.0)
        P(K) estimated by FV2: 2.181% (simulation time = 20.0)
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Replication 4 of 10... execution time: 18.0 sec
        P(K) by MC: 1.604%, E(T) = 3.9 (simulation time = 11340.0)
        P(K) estimated by FV1: 0.852% (simulation time = 20.0)
        P(K) estimated by FV2: 3.126% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 5 of 10... execution time: 18.0 sec
        P(K) by MC: 1.440%, E(T) = 3.9 (simulation time = 11340.0)
        P(K) estimated by FV1: 0.740% (simulation time = 20.0)
        P(K) estimated by FV2: 2.616% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 6 of 10... execution time: 18.1 sec
        P(K) by MC: 1.688%, E(T) = 4.0 (simulation time = 11340.0)
        P(K) estimated by FV1: 0.875% (simulation time = 20.0)
        P(K) estimated by FV2: 3.048% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 7 of 10... execution time: 18.6 sec
        P(K) by MC: 1.402%, E(T) = 3.9 (simulation time = 11340.0)
        P(K) estimated by FV1: 1.020% (simulation time = 20.0)
        P(K) estimated by FV2: 3.153% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 8 of 10... execution time: 21.8 sec
        P(K) by MC: 1.442%, E(T) = 3.9 (simulation time = 11340.0)
        P(K) estimated by FV1: 1.088% (simulation time = 20.0)
        P(K) estimated by FV2: 3.515% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 9 of 10... execution time: 18.5 sec
        P(K) by MC: 1.608%, E(T) = 4.0 (simulation time = 11340.0)
        P(K) estimated by FV1: 0.922% (simulation time = 20.0)
       P(K) estimated by FV2: 3.337% (simulation time = 20.0)
        True P(K): 1.587%
        Replication 10 of 10... execution time: 19.5 sec
        P(K) by MC: 1.378%, E(T) = 3.9 (simulation time = 11340.0)
        P(K) estimated by FV1: 1.196% (simulation time = 20.0)
        P(K) estimated by FV2: 4.047% (simulation time = 20.0)
       True P(K): 1.587%
Total execution time: 9.6 min
Simulation results for c=1, K=5, rhos=[0.5], (50 <= N <= 600), T<=20
Raw results by N:
                      Pr(MC) Time(MC)
     N replication
                                            F(T)
                                                    Pr(FV) Time(FV)
                                1000.0 4.037939 0.010401
1
                 1 0.009517
                                                                20.0
1
    50
                 2 0.017621
                                1000.0 3.769863 0.002331
                                                                20.0
                                1000.0 3.660527 0.013198
1
    50
                 3 0.011660
                                                                20.0
                                1000.0 3.919891 0.008836
1
                 4 0.019223
                                                                20.0
    50
1
     50
                 5 0.015481
                                1000.0 4.190772 0.014383
                                                                20.0
1
    50
                 6
                    0.021070
                                1000.0 3.961553 0.002496
                                                                20.0
                                1000.0 3.739551 0.007722
1
    50
                    0.012020
                                                                20.0
1
    50
                 8 0.024682
                                1000.0 4.129201 0.007547
                                                                20.0
                                1000.0 3.983336 0.006664
1
    50
                 9 0.019832
                                                                20.0
                10
                                                  0.015798
1
     50
                    0.022943
                                1000.0 4.046470
                                                                20.0
                                1500.0 4.093068 0.004077
2
    75
                 1 0.012320
                                                                20.0
2
                                1500.0 3.813710 0.009112
                 2 0.018975
                 3 0.008067
                                1500.0 3.621072 0.015323
2
    75
                                                                20.0
2
     75
                 4
                    0.016766
                                1500.0 3.987768
                                                  0.007431
                                                                20.0
                                1500.0 4.235718 0.010481
    75
                 5 0.015677
2
                                                                20.0
2
                 6 0.017389
                                1500.0 3.798729 0.007003
    75
                                                                20.0
                                1500.0 3.790299 0.021959
2
    75
                    0.009383
                                                                20.0
2
    75
                 8
                    0.018804
                                1500.0 4.208646 0.010110
                                                                20.0
                 9 0.019379
                                1500.0 3.924832 0.006466
    75
                                                                20.0
2
    75
                10 0.017148
                                1500.0 3.809408 0.011227
                                                                20.0
                 1 0.012614
3
    112
                                2240.0 4.177593 0.005178
                                                                20.0
3
    112
                 2 0.017897
                                2240.0 3.814497 0.010929
                                                                20.0
3
   112
                 3 0.007614
                                2240.0 3.658885 0.009787
                                                                20.0
3
   112
                 4 0.015421
                                2240.0 3.894965 0.009078
                                                                20.0
3
    112
                 5
                    0.019094
                                2240.0 4.109107 0.013704
                                                                20.0
                                2240.0 3.851202 0.016070
3
   112
                 6 0.014877
                                                                20.0
    112
                 7 0.007303
                                2240.0 3.821448 0.007065
                                                                20.0
                 8 0.014788
                                2240.0 4.007005 0.009081
                                                                20.0
3
   112
                    0.017044
                 9
                                2240.0 4.053191 0.007665
    112
                                                                20.0
                                2240.0 3.877872 0.009583
                10 0.017420
3
   112
                                                                20.0
                . . .
                                   . . .
                                5040.0 3.952503 0.008209
                 1 0.011200
                                                                20.0
5
   252
   252
                 2 0.013608
                                5040.0 3.879711 0.008864
                                                                20.0
```

True P(K): 1.587%

```
5
    252
                  3 0.009850
                                 5040.0 3.762114 0.009180
                                                                 20.0
5
    252
                    0.014712
                                 5040.0 3.806382
                                                   0.007255
                                                                 20.0
5
                                                                 20.0
    252
                  5
                    0.015976
                                 5040.0 3.936310
                                                   0.009378
5
                                                                 20.0
    252
                  6
                     0.016352
                                 5040.0
                                        3.956794
                                                   0.006065
5
                                                   0.006017
                                                                 20.0
    252
                    0.011853
                                 5040.0
                                        3.840166
5
    252
                    0.014908
                                 5040.0 3.951534
                                                   0.007541
                                                                 20.0
5
                    0.017544
                                 5040.0 3.974609
                                                  0.006550
                  9
                                                                 20.0
    252
5
                 10
                    0.014149
                                 5040.0
                                        3.809634
                                                   0.011788
                                                                 20.0
    252
6
    378
                 1
                    0.013858
                                 7560.0 4.005252
                                                   0.006685
                                                                 20.0
                     0.014317
    378
                                 7560.0
                                        3.892863
                                                   0.011198
                                                                 20.0
6
6
    378
                  3
                    0.010232
                                 7560.0
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                                                   0.006749
                                                                 20.0
    378
                  4
                    0.014491
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                                         3.893692
                                                   0.008409
                                                                 20.0
6
    378
                  5
                    0.014161
                                 7560.0 3.876818
                                                   0.007290
                                                                 20.0
6
    378
                  6
                    0.017602
                                 7560.0 3.912086
                                                   0.007910
                                                                 20.0
6
                    0.011436
                                 7560.0 3.835536
                                                   0.008868
                                                                 20.0
6
    378
                  7
6
    378
                  8
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                                 7560.0
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                                                   0.010008
                                                                 20.0
    378
                 9
                    0.015663
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6
6
    378
                 10 0.013694
                                7560.0 3.878378
                                                  0.013740
                                                                 20.0
7
    567
                    0.013393
                                11340.0
                                        3.989736
                                                   0.007107
                                                                 20.0
                 1
7
    567
                  2
                    0.014864
                               11340.0
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                                                   0.009169
                                                                 20.0
7
    567
                  3
                    0.011366
                               11340.0 3.795776
                                                   0.007166
                                                                 20.0
                                                  0.008521
7
                               11340.0 3.905205
    567
                  4
                    0.016039
                                                                 20.0
7
    567
                  5
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                                11340.0
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                                                                 20.0
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                                                   0.008745
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                               11340.0
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                  6
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7
    567
                    0.014019
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                                                   0.010196
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    567
                  8 0.014422
                               11340.0 3.936923 0.010882
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7
                  9
                                11340.0
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                                                                 20.0
    567
                    0.016083
                                                   0.009219
7
                10 0.013784
                               11340.0 3.878656 0.011963
                                                                 20.0
    567
```

Pr(K) exec\_time(s) 1 0.015873 3.406436 0.015873 1,403521 1 0.015873 1.531742 1 0.015873 1.350661 1 0.015873 1.925792 1 1 0.015873 1.560017 1 0.015873 1.442059 0.015873 1.336967 1 1 0.015873 1.338724 0.015873 1.376079 1 2 0.015873 2,224905 2 0.015873 2.205065 2 0.015873 2.038568 2 0.015873 2.024581 2 0.015873 2.152131 2 0.015873 2.201479 2 0.015873 2.122464 2 0.015873 2.213754 2 0.015873 2.785808 0.015873 2.321164 3 0.015873 3.363914 3 0.015873 3.375198 0.015873 3.858599 3 3 0.015873 3.178429 0.015873 3.342653 3 3 0.015873 3.302950 0.015873 3.356872 3 3 0.015873 3.526266 3 0.015873 3.914722 3 0.015873 5.929849 . . . . . . . . 5 0.015873 9.177115 5 0.015873 17.297371 5 0.015873 11.314301 5 0.015873 8.975899 5 0.015873 13.695040 5 0.015873 9.957253 5 0.015873 9.361583 0.015873 10.161612 5 5 0.015873 9.128102 0.015873 7.858996 0.015873 11.990133 6

6

0.015873

14.954115

```
6
    0.015873
                 11.882882
    0.015873
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6
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6
    0.015873
                  14.184806
6
    0.015873
                 16.445065
6
    0.015873
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6
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6
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                  16.678117
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                  22.047401
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    0.015873
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    0.015873
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7
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    0.015873
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7
    0.015873
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7
    0.015873
                  19.516027
```

## [70 rows x 9 columns]

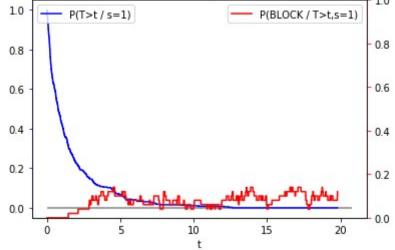
Aggregated results by N:

-	_		•						
	n	mean		std			min		\
	Pr(MC)	Pr(FV)	Pr(MC)	Pr(FV)	Pr(MC)	Pr(FV)	Pr(MC)	Pr(FV)	
N									
50	10	10	0.017405	0.008938	0.005101	0.004604	0.009517	0.002331	
75	10	10	0.015391	0.010319	0.004064	0.005121	0.008067	0.004077	
112	10	10	0.014407	0.009814	0.004102	0.003168	0.007303	0.005178	
168	10	10	0.014514	0.008981	0.003039	0.002030	0.008521	0.006229	
252	10	10	0.014015	0.008085	0.002431	0.001792	0.009850	0.006017	
378	10	10	0.013794	0.009055	0.002078	0.002203	0.010232	0.006685	
567	10	10	0.014525	0.009036	0.001580	0.001620	0.011366	0.007107	

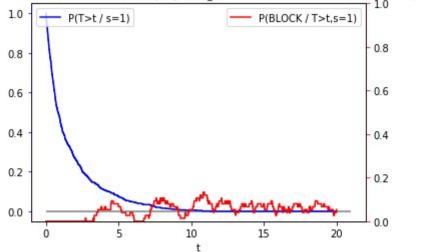
SE max Pr(MC) Pr(MC) Pr(FV) Pr(FV) 50 0.024682 0.015798 0.001613 0.001456 0.001619 75 0.019379 0.021959 0.001285 0.019094 0.016070 0.001297 0.001002 112 168 0.017374 0.012491 0.000961 0.000642 0.000769 252 0.017544 0.011788 0.000567 378 0.017602 0.013740 0.000657 0.000697 567 0.016878 0.011963 0.000500 0.000512

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)

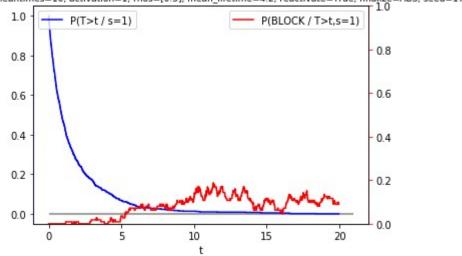




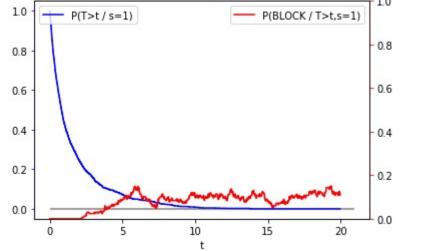
K=5, N=75, nmeantimes=10, activation=1, rhos=[0.5], mean\_lifetime=4.1, reactivate=True, finalize=ABS, seed=1717



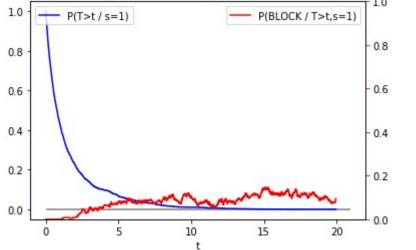
K=5, N=112, nmeantimes=10, activation=1, rhos=[0.5], mean\_lifetime=4.2, reactivate=True, finalize=ABS, seed=1717



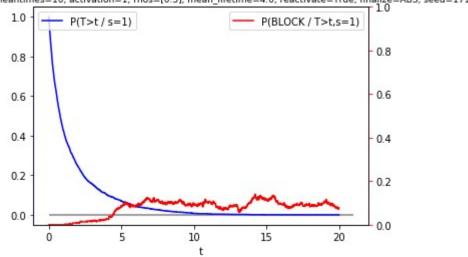
K=5, N=168, nmeantimes=10, activation=1, rhos=[0.5], mean\_lifetime=4.1, reactivate=True, finalize=ABS, seed=1717



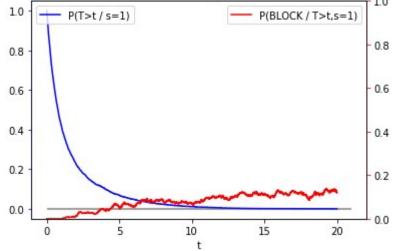
K=5, N=252, nmeantimes=10, activation=1, rhos=[0.5], mean\_lifetime=4.0, reactivate=True, finalize=ABS, seed=1717



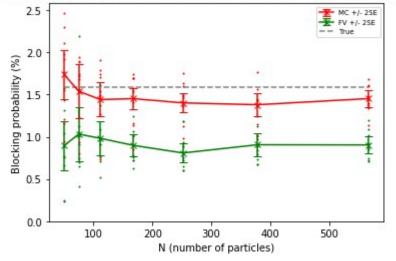
K=5, N=378, nmeantimes=10, activation=1, rhos=[0.5], mean\_lifetime=4.0, reactivate=True, finalize=ABS, seed=1717



K=5, N=567, nmeantimes=10, activation=1, rhos=[0.5], mean\_lifetime=4.0, reactivate=True, finalize=ABS, seed=1717







In [**611**]: