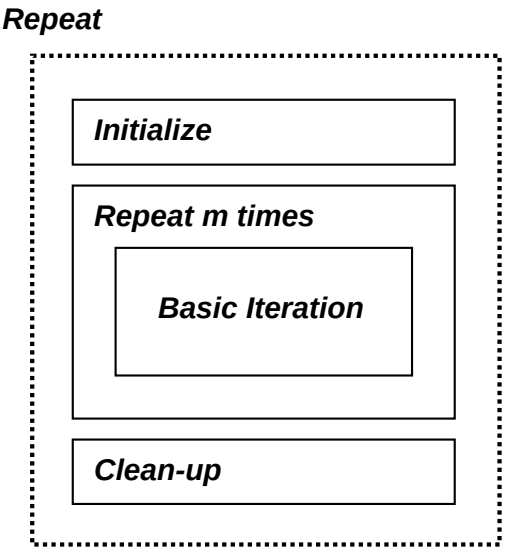
Efficient CM-2 Monte-Carlo Simulation

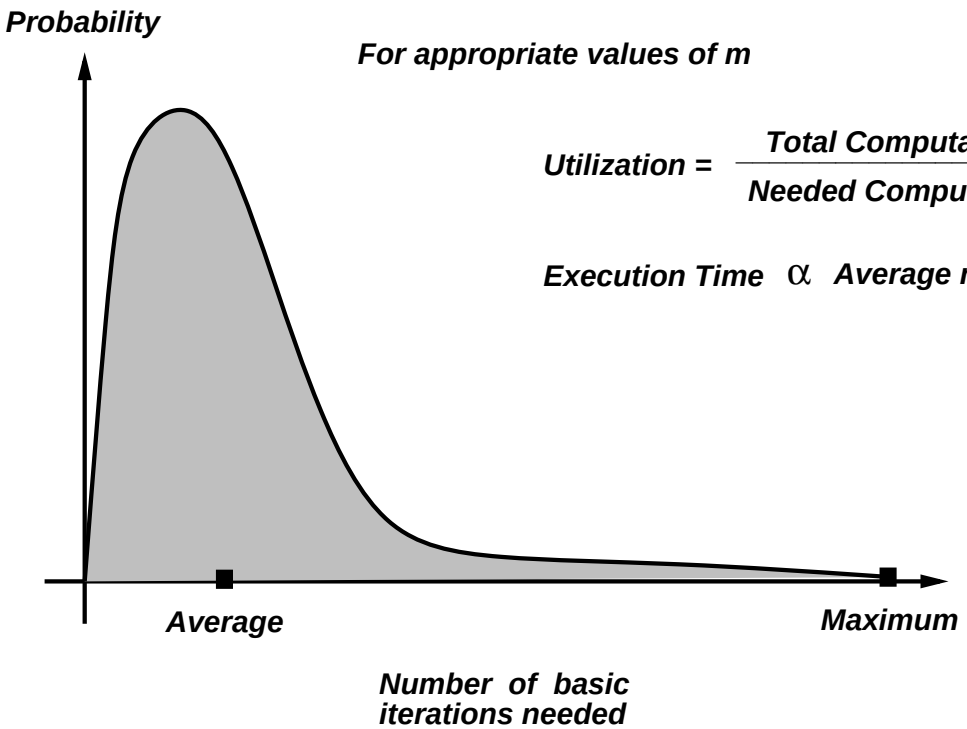
```
While (More experiments needed)

  Initialize and activate idle PEs ;

  Repeat m times
    Perform an iteration in parallel ;
    If (Deflected/Reflected/Absorbed)
       Record state ;
       Idle ;

  Collect statistics from idle PEs;
```





For appropriate values of m

$$\text{Utilization} = \frac{\text{Total Computation Time}}{\text{Needed Computation Time}} \;\alpha\; \frac{1}{SD}$$

$$\text{Execution Time} \;\alpha\; \text{Average number of iteration}$$