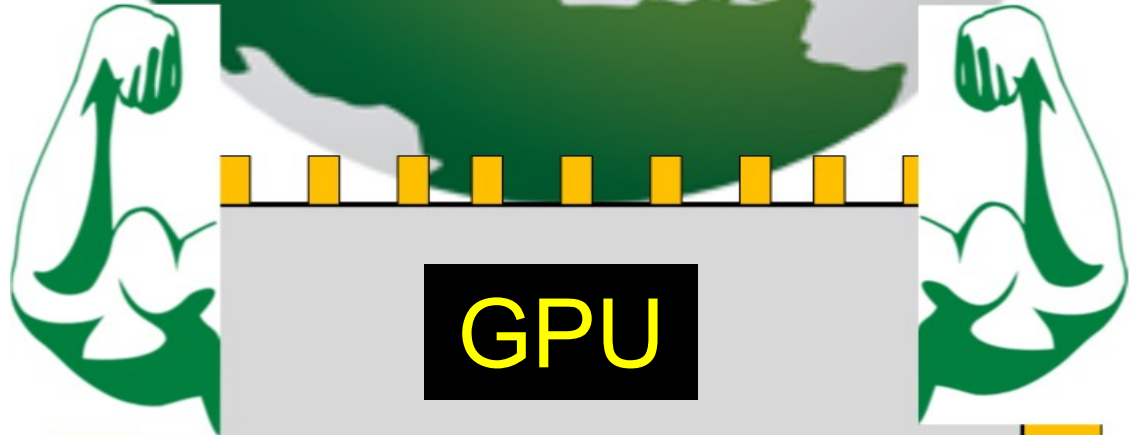




**GPU
Programmer**



Locality



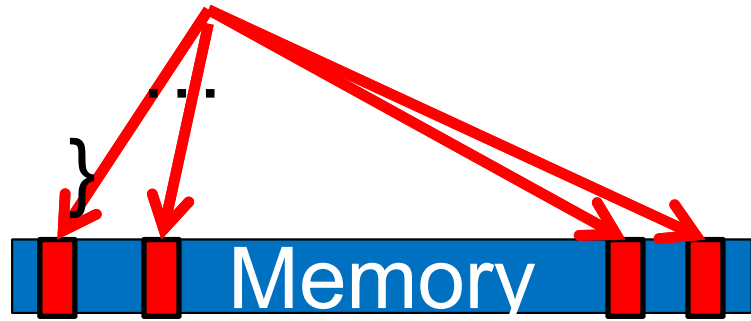
GPU



**Divergence-Aware
Warp Scheduling**

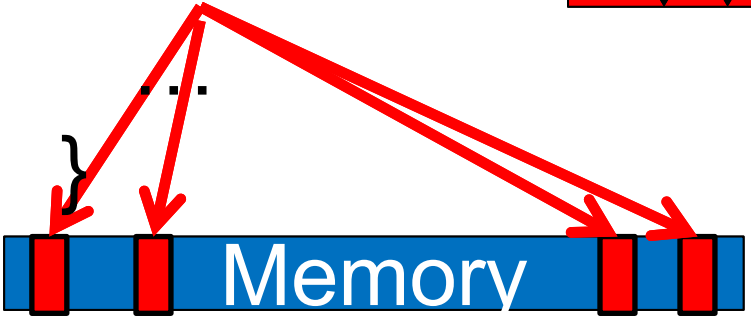
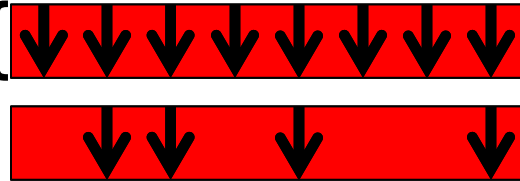
```
while (x[tid]) {  
    load  
    ...  
}
```

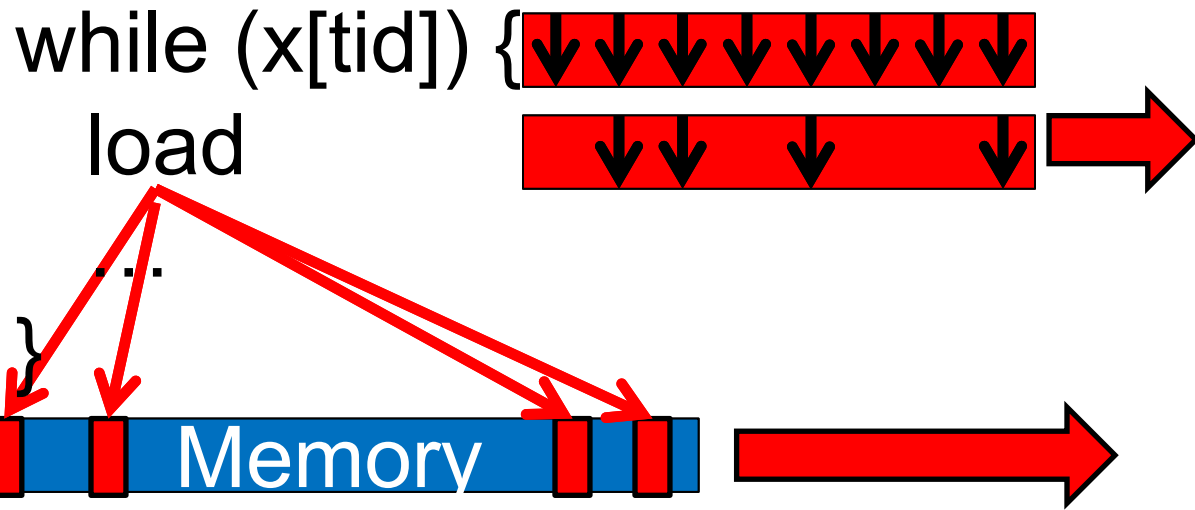
```
while (x[tid]) {  
  load
```



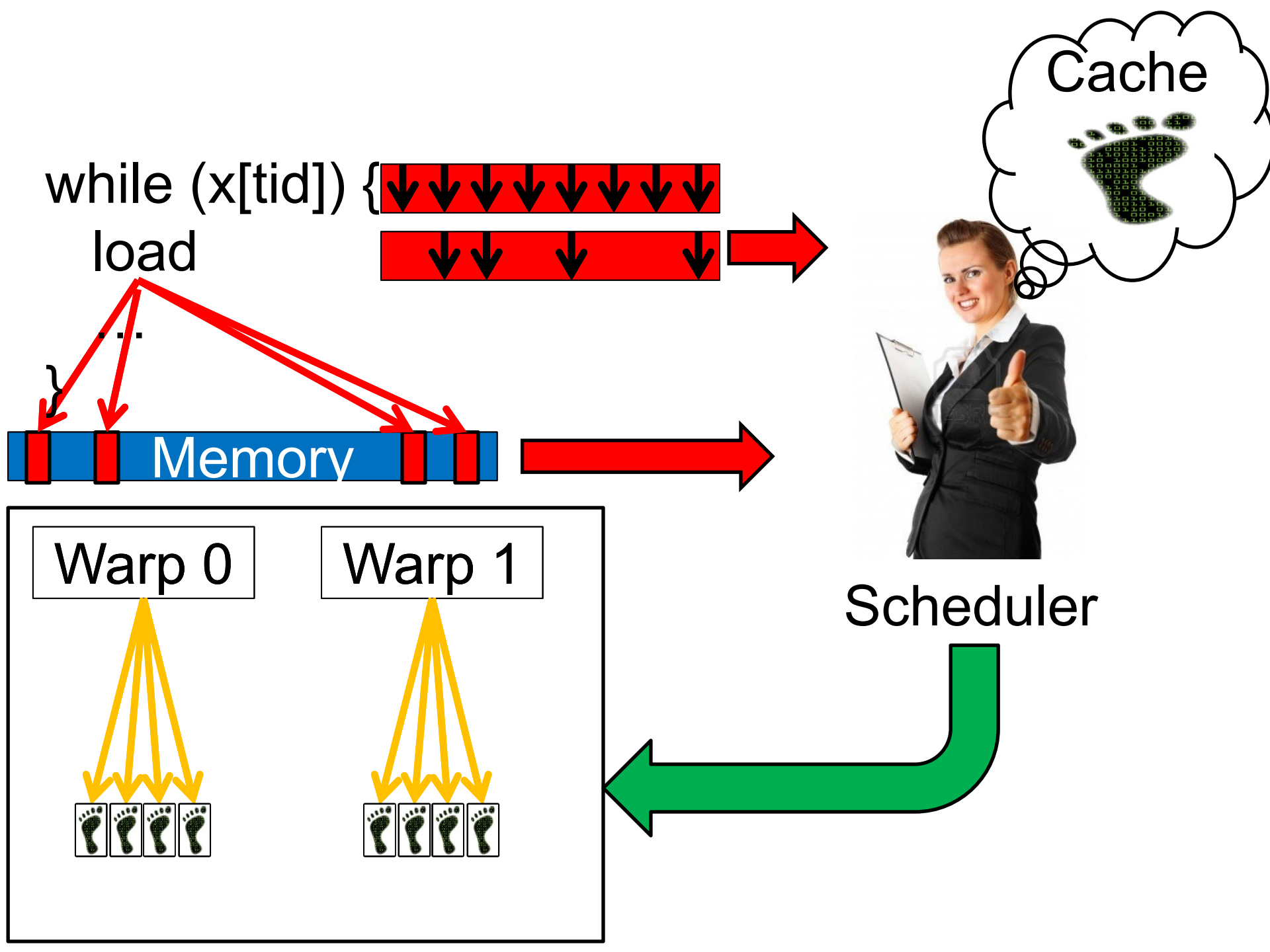
while (x[tid]) {

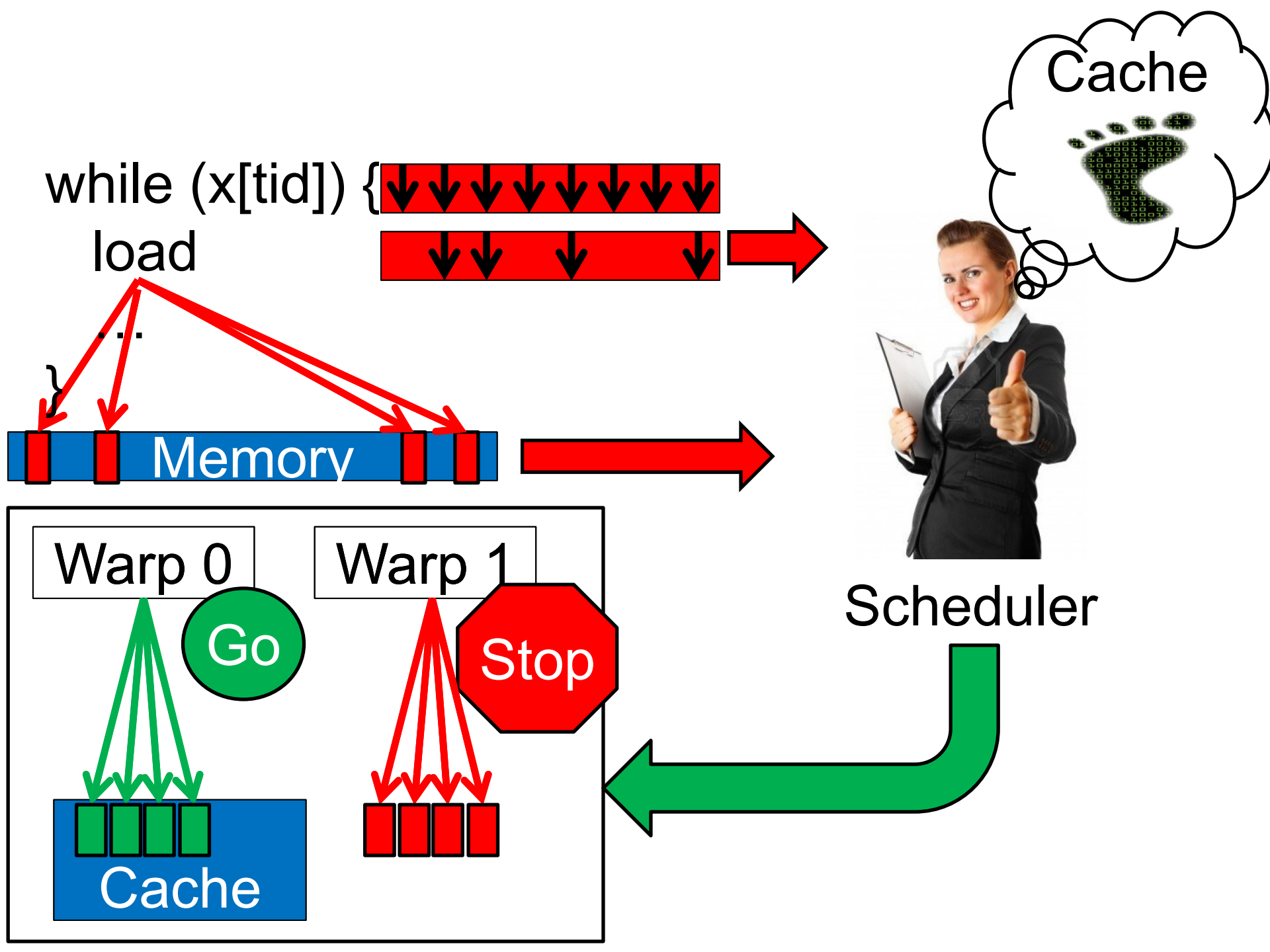
load



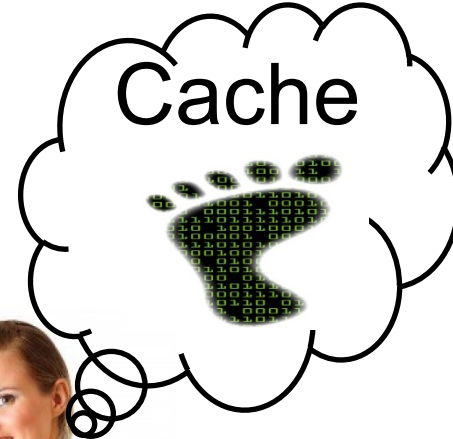
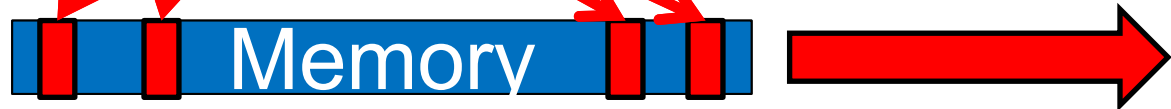
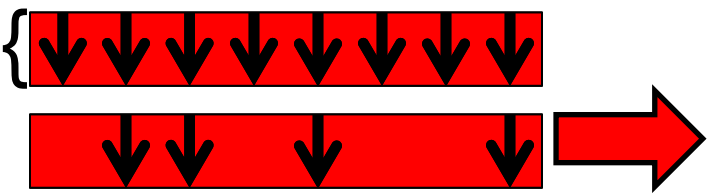


Scheduler

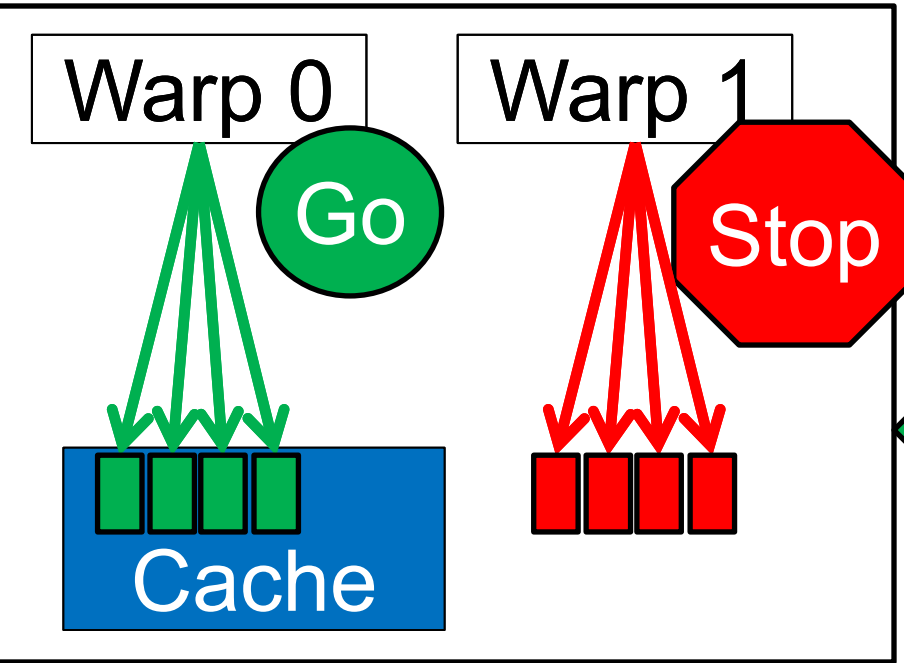




while (x[tid])
load



Scheduler





Timothy G. Rogers, Mike O'Connor, Tor M. Aamodt

26%

Speedup

Today 4:30pm Conference Center Ballroom

Timothy G. Rogers, Mike O'Connor, Tor M. Aamodt

Within

4%

2.8x

less instr

Today 4:30pm Conference Center Ballroom