```
//n: number of SMs to yield blocks
//k: number of blocks to yield
BE_Kernel(...) {
    sm_id = get_sm_id();
    blk_id = atomic_get_blk_id();
    while(task_queue is non-empty) {
        if( sm_id < n && blk_id > num_blks[sm_id]) quit;
        else {
            task = pull_task();
            execute(task);
}}}
```