



# Push and notify

```
void push_and_notify(T item)
{
    lock_guard lk{ _m };
    _q.push(std::move(item));
}
_cv.notify_all();
}
```

sleep until there are new items to pop

```
void wait_and_pop(T& item)
```

```
{
```

```
    std::unique_lock<std::mutex> lk{ _m };
```

```
    _cv.wait(lk, [this]{ return !_q.empty(); });
```

```
    item = std::move(_q.front());
```

```
    _q.pop();
```

```
}
```

# Signal events

```
std::condition_variable _cv;
```







## Signal events

→ `std::condition_variable _cv;`

## Push and notify

```
void push_and_notify(T item)
{
    {
        lock_guard lk{ _m };
        _q.push(std::move(item));
    }
    → _cv.notify_all();
}
```

## sleep until there are new items to pop

```
void wait_and_pop(T& item)
{
    → std::unique_lock<std::mutex> lk{ _m };
    _cv.wait(lk, [this]{ return !_q.empty(); });
    item = std::move(_q.front());
    _q.pop();
}
```



15:50:13

```
MemRegions: 90613 total, 2434M resident, 65M private, 640M shared. PhysMem: 8119M used (1295M wired), 72M unused.
```

Disk: 2508267/95G read, 3057143/126G written.

[illegible]