

Introducing

# Concurrency

GCD Delights

[raywenderlich.com](http://raywenderlich.com)

# dispatch\_once

---

Thread 1

initial setup

function

Thread 2

Thread 3

time

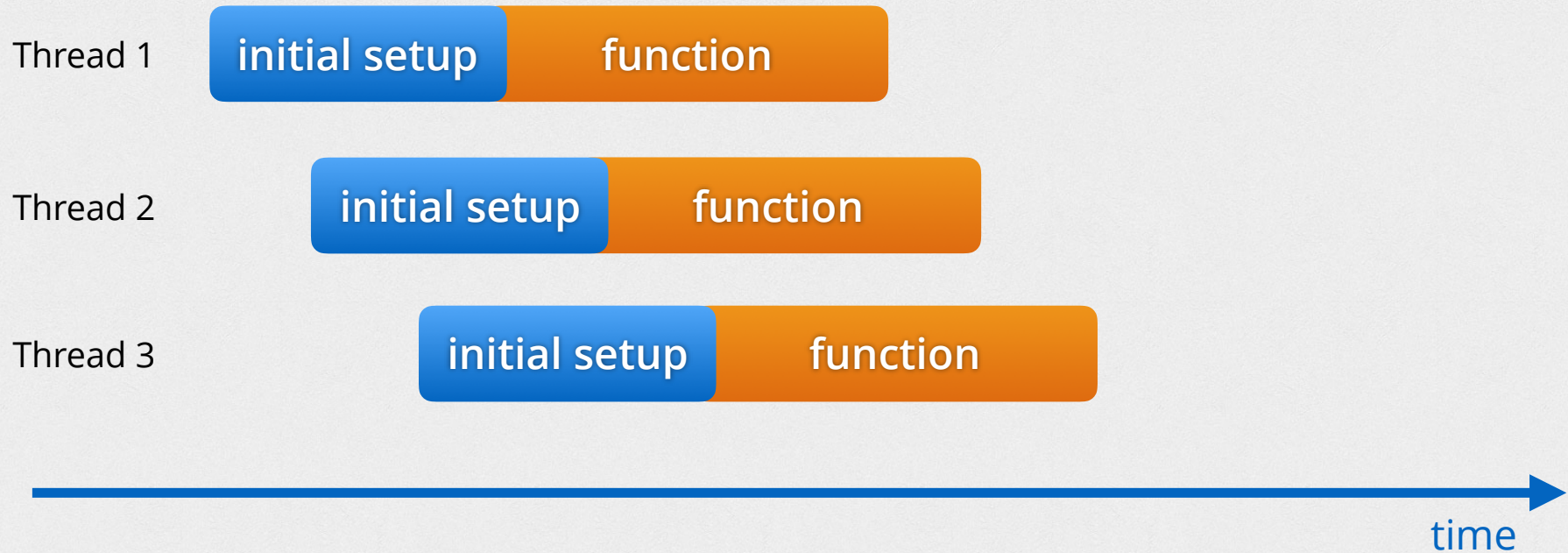
# dispatch\_once

---



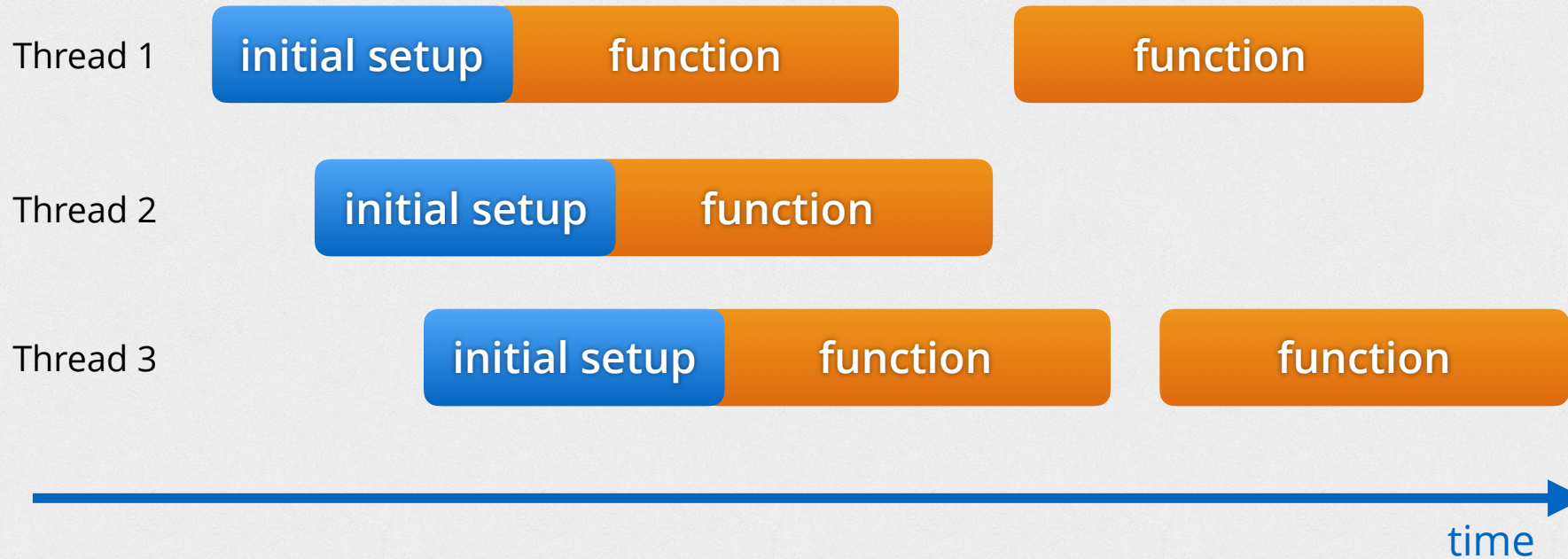
# dispatch\_once

---

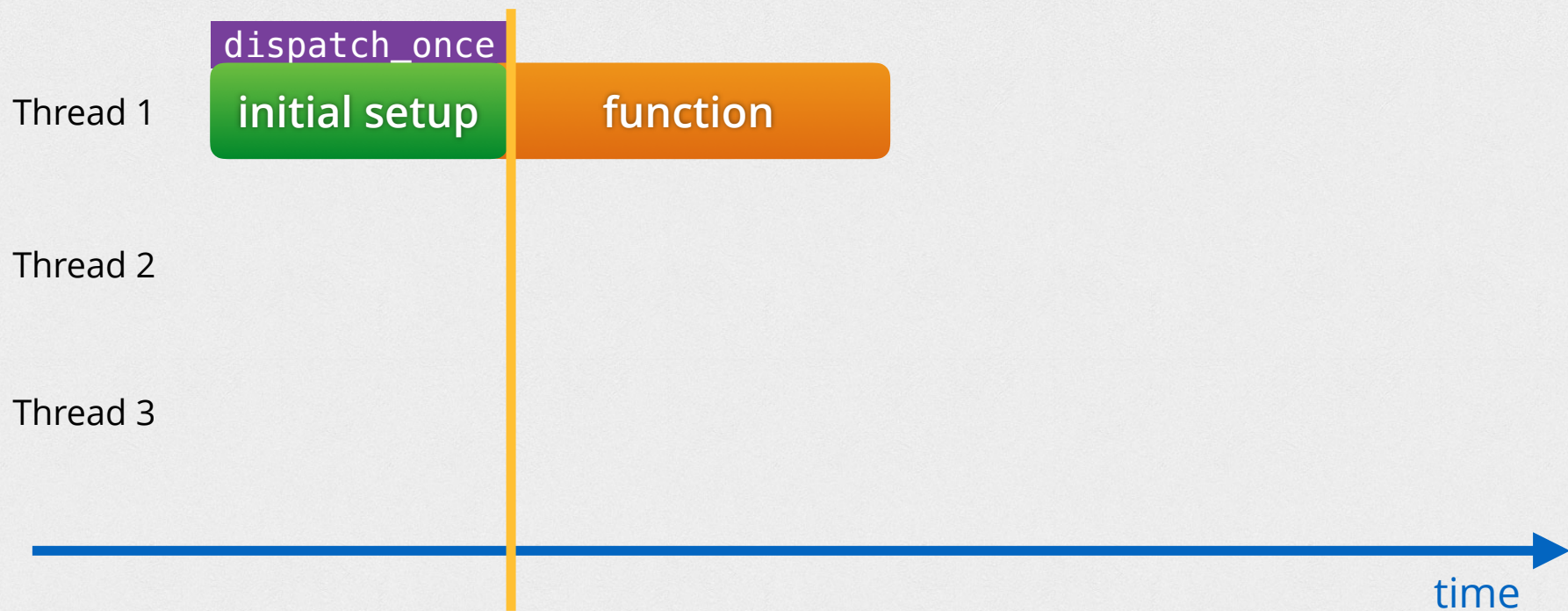




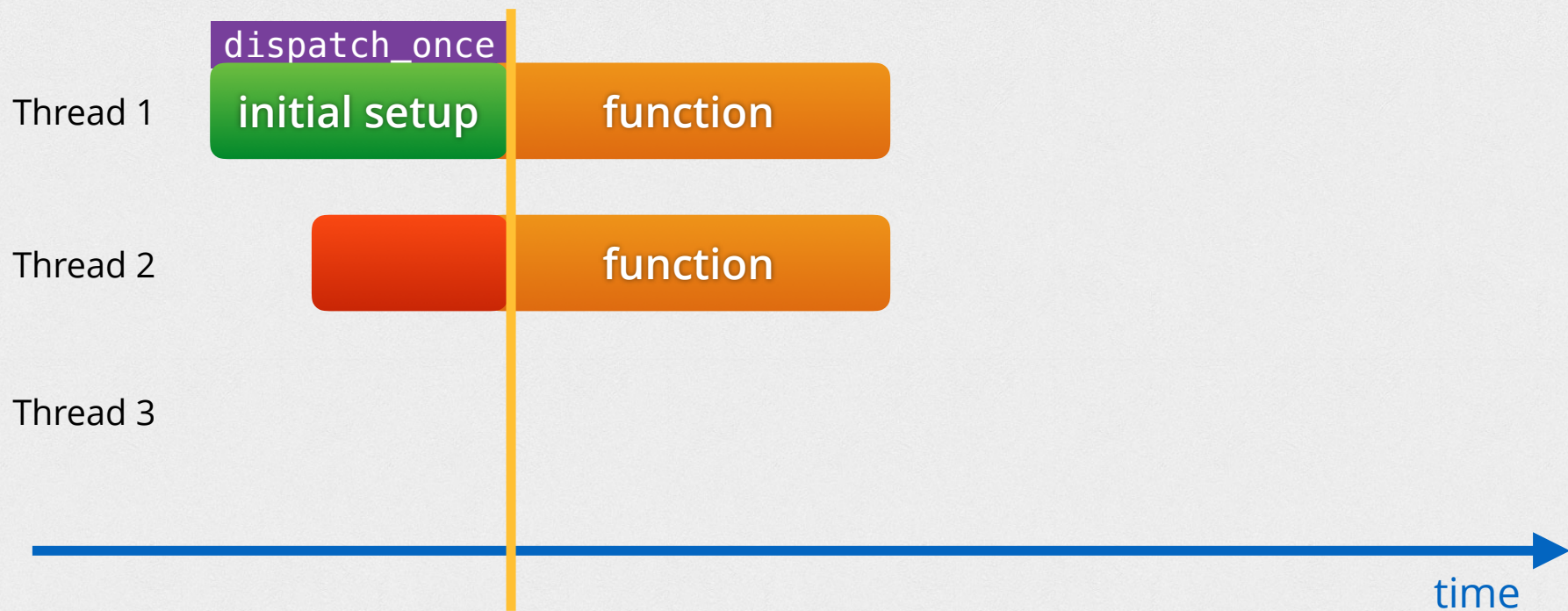
# dispatch\_once



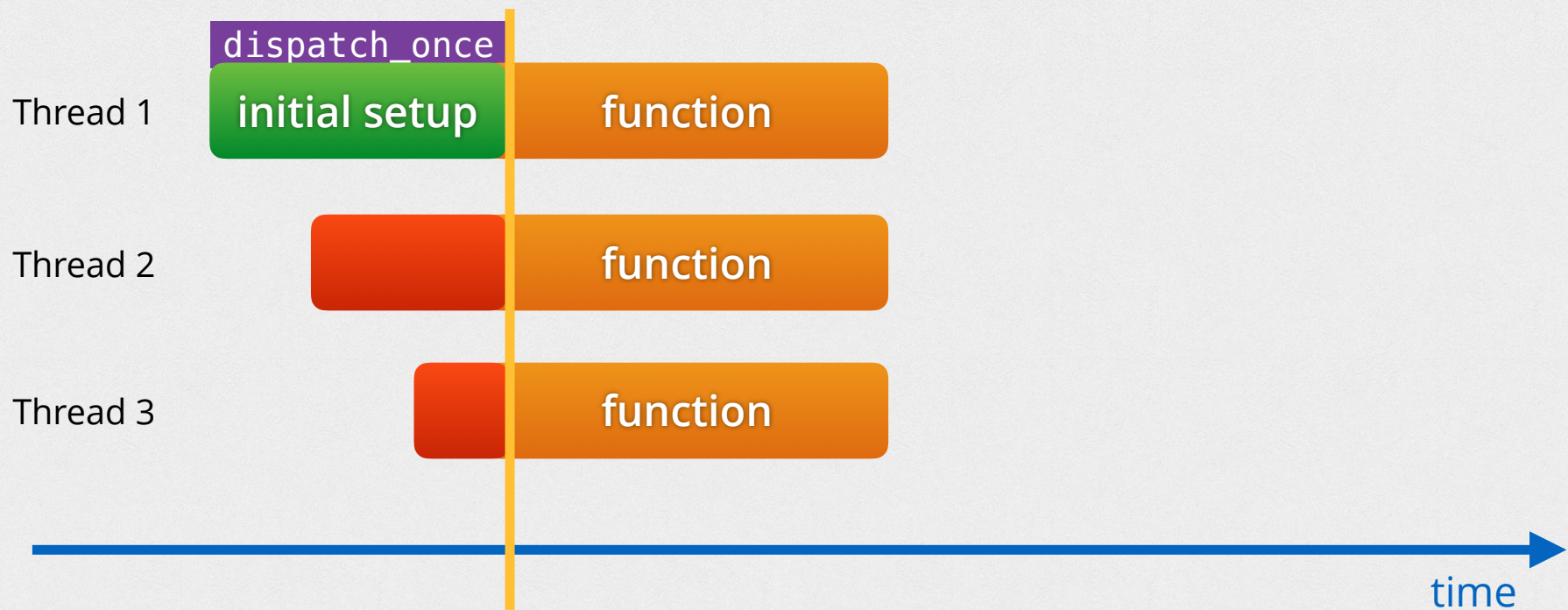
# dispatch\_once



# dispatch\_once

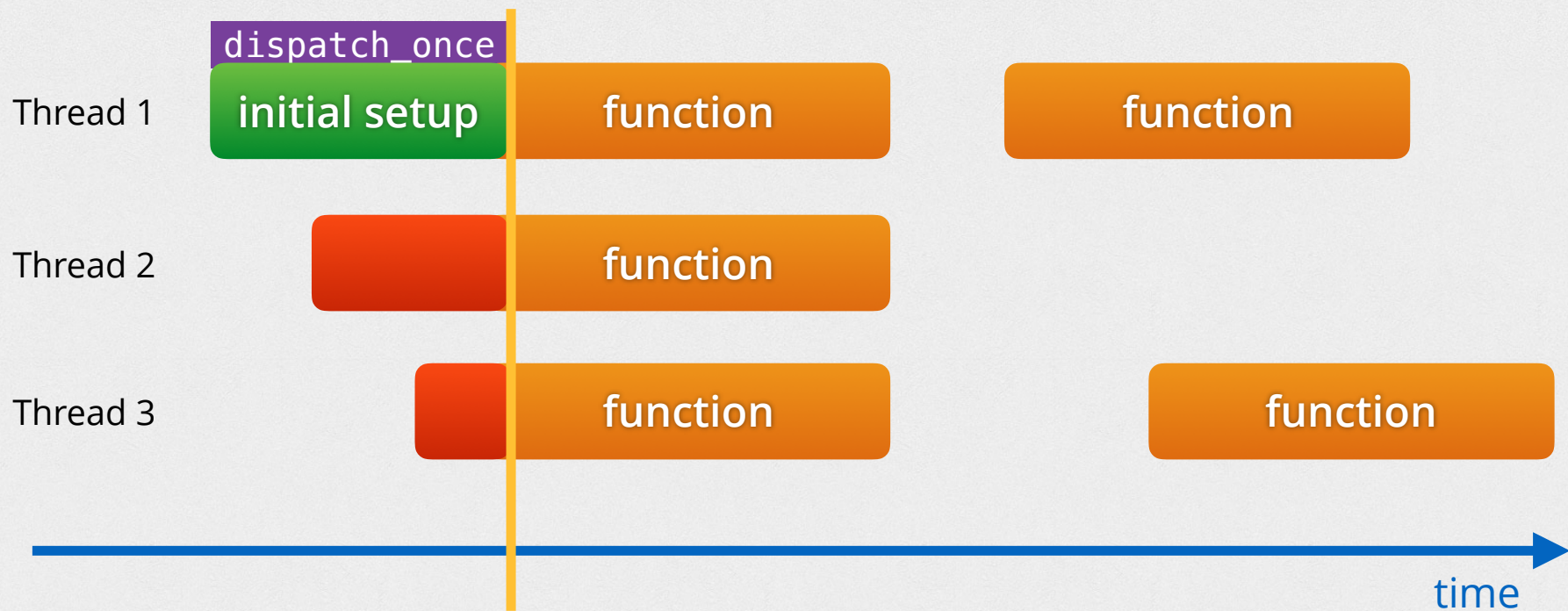


# dispatch\_once





# dispatch\_once



# dispatch\_once

---

```
var onceToken: dispatch_once_t = 0

dispatch_once(&onceToken) {
    print("Only executes the first ever time")
}
```

# dispatch\_after

---

```
let startTime = dispatch_time(DISPATCH_TIME_NOW,  
                               Int64(delay * Double(NSEC_PER_SEC)))  
  
dispatch_after(startTime, dispatch_get_main_queue()) {  
    // Do something  
}
```

# It's Challenge Time!

---

