# Producer/consumer queue

producer
adds task

t1
(producer)

| task | task | task | ......... | task |

thread-safe
queue of tasks

t2
(consumer)

consumer removes
and executes task
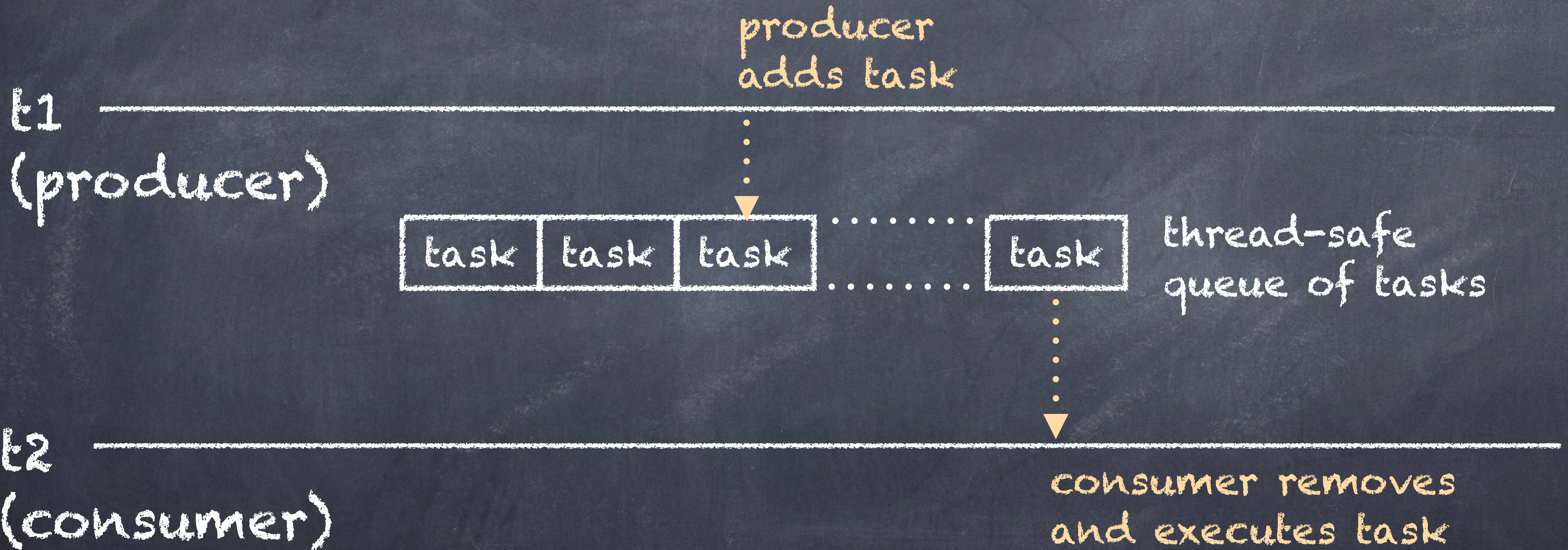
# Producer/consumer queue

- A common pattern in multi-threaded code is the producer/consumer queue
- This code pattern supports multiple producers and consumers, and can easily scale up to high workloads.
- To build a producer/consumer queue you will need a thread-safe queue of tasks, and one AutoResetEvent to signal the consumers that a new task is available.

- The console is not thread-safe. If you change console settings, you will need to secure that operation with a lock statement.