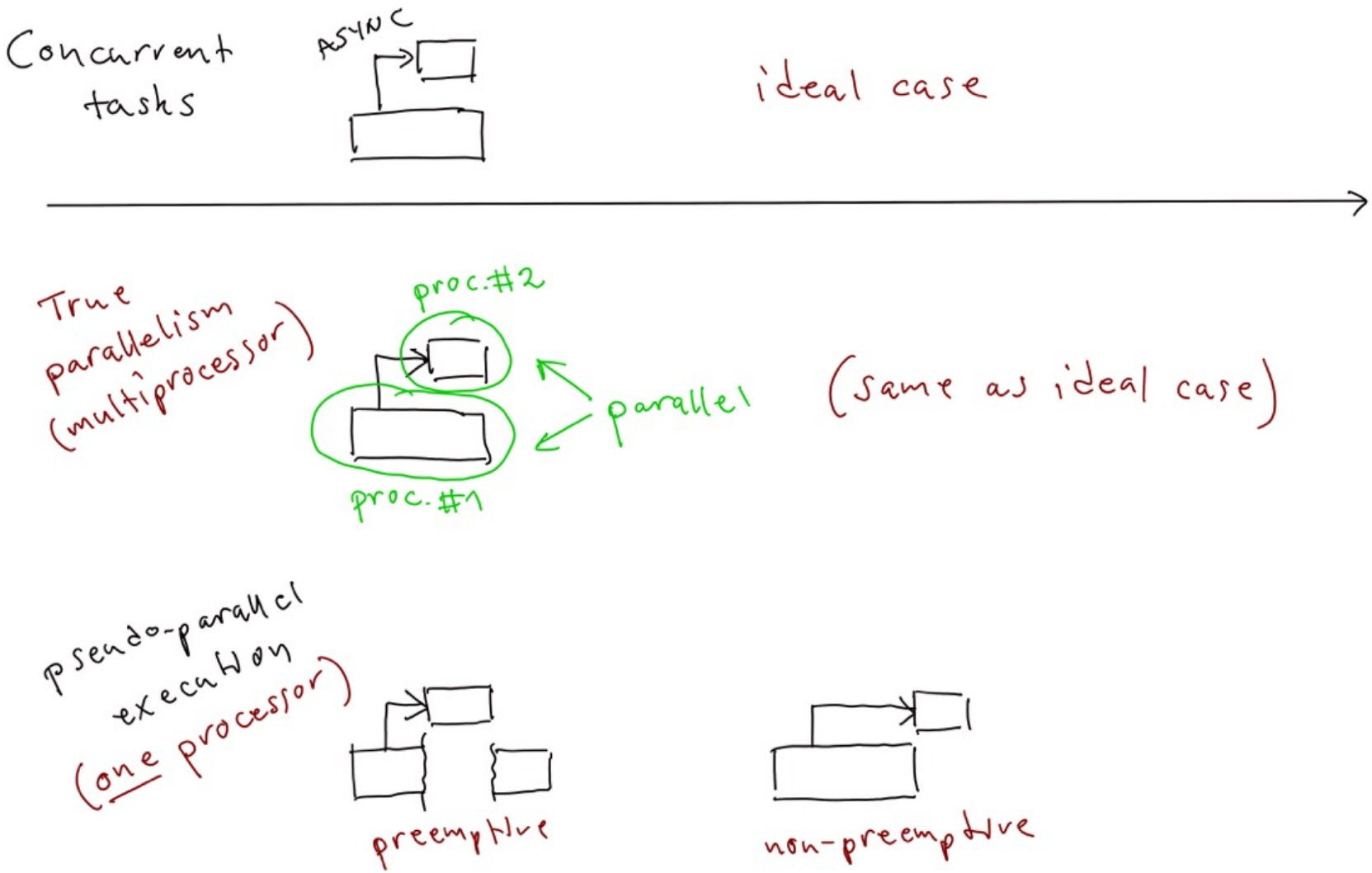
# Lecture #14 – blackboard scribble



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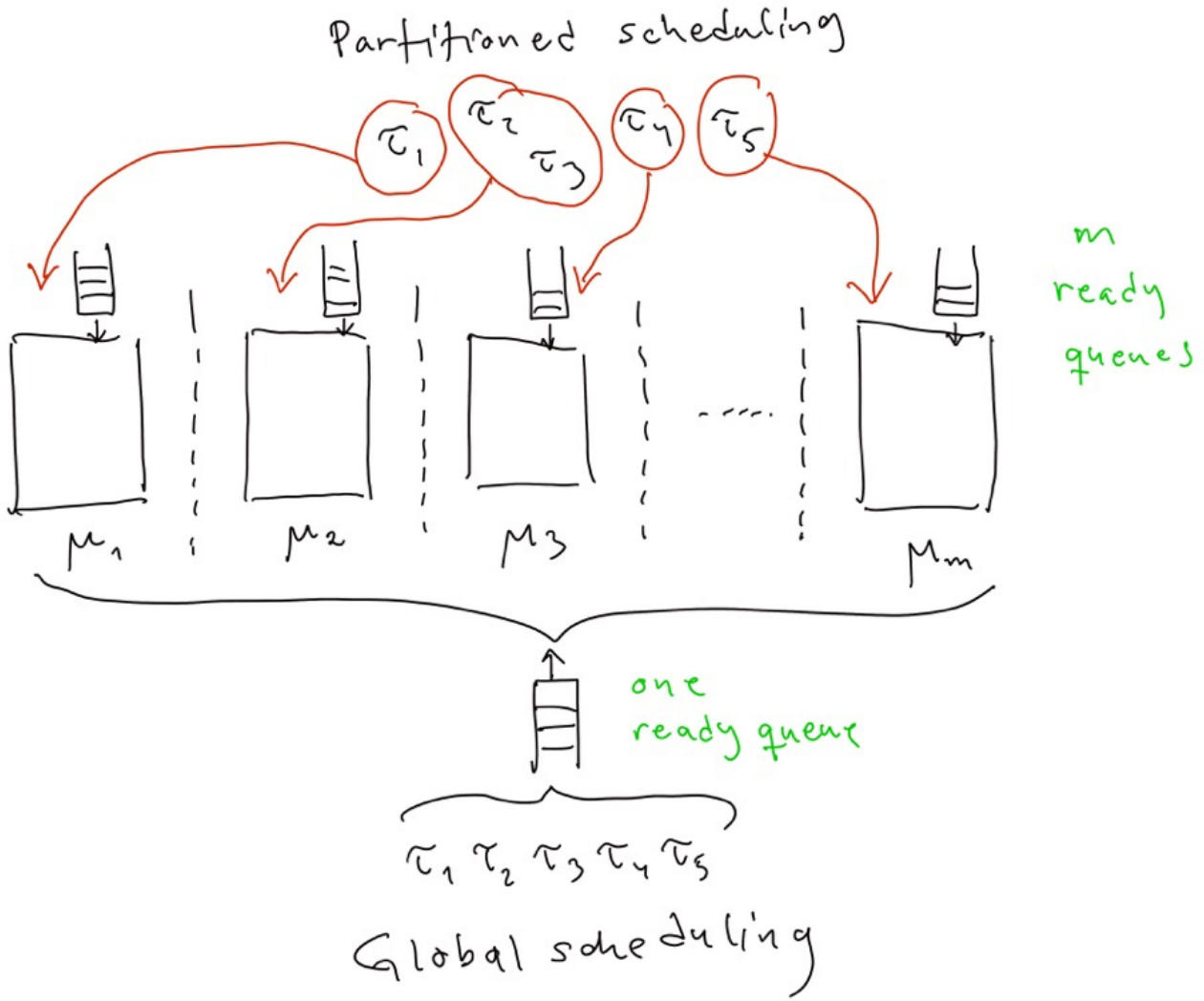

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RM-US[m/(3m-2)]

m = 3 processors

Calculate utilization-separation (US) bound:

$m/(3m-2) = 3/(3 \cdot 3 - 2) = 3/7 \approx 0,43$

| | Task | $C_i$ | $T_i$ | $U_i$ |
|---|---|---|---|---|
| $M_H$ | $\tau_1$ | 1 | 7 | 0,143 |
| $M_L$ | $\tau_2$ | 2 | 10 | 0,2 |
| H | $\tau_3$ | 9 | 20 | 0,45 |
| H | $\tau_4$ | 11 | 22 | 0,5 |
| L | $\tau_5$ | 2 | 25 | 0,08 |

Derive priorities:

Based on the US bound (0,43) tasks $\tau_3$ and $\tau_4$ are considered "heavy" tasks, and are assigned highest priority.

The remaining tasks are assigned RM priorities.

This gives two possible priority assignments (high → low)

$\tau_3, \tau_4, \tau_1, \tau_2, \tau_5$

or

$\tau_4, \tau_3, \tau_1, \tau_2, \tau_5$