





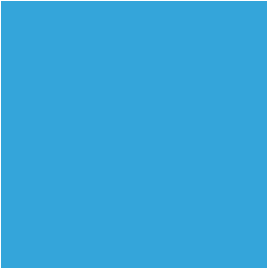
MEMORY MODEL

PROCESS
A



















PROCESS
B

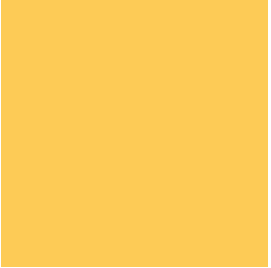








Ox0000000





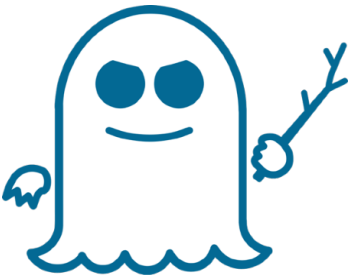














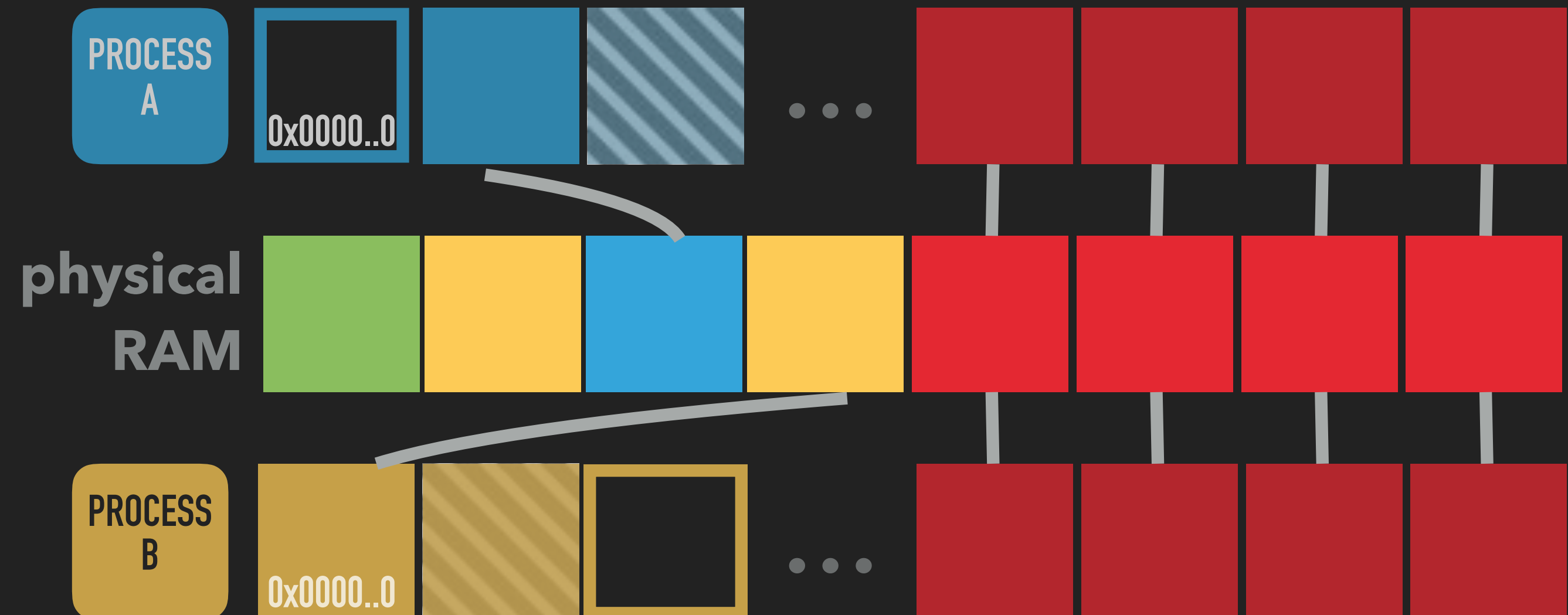


▶ c) is vulnerable to Meltdown and Spectre

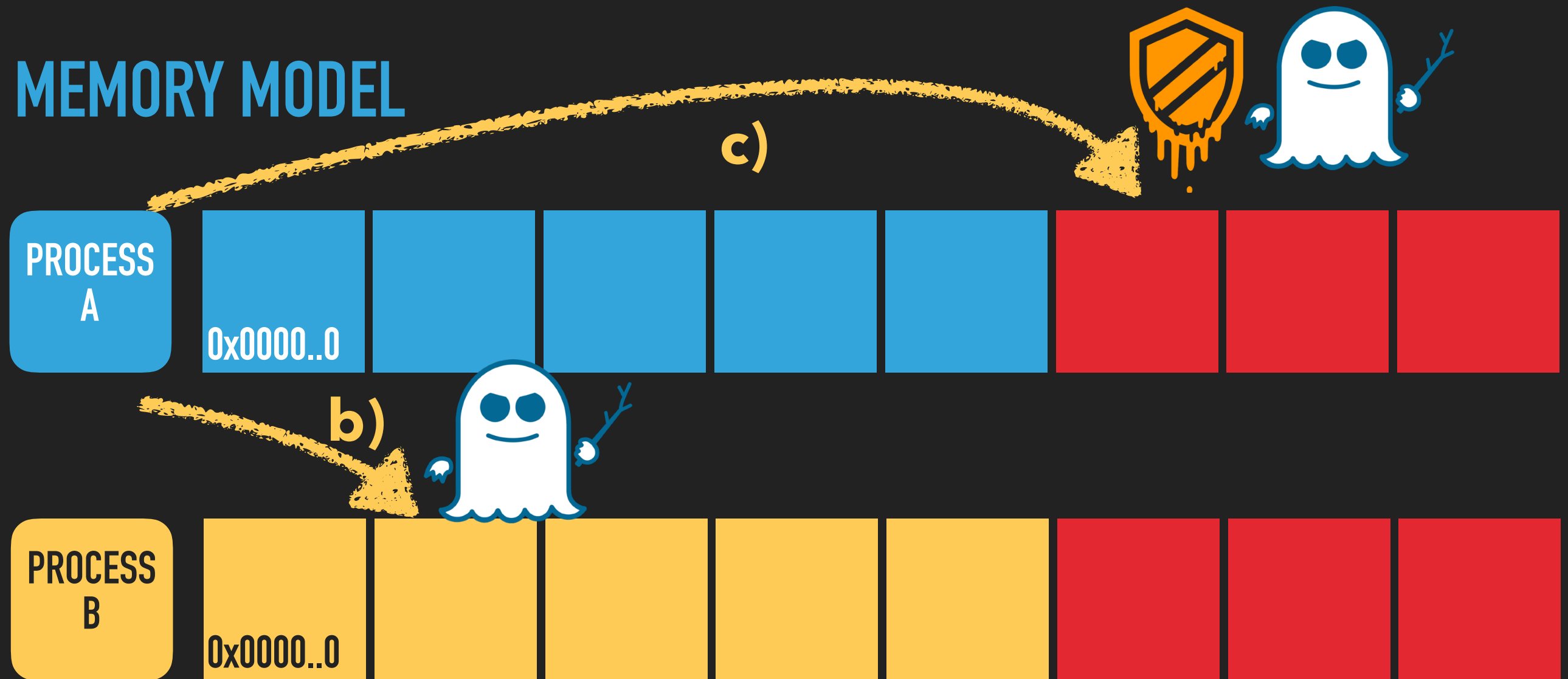
▶ **b)** is vulnerable to Spectre

MEMORY MODEL

- ▶ Virtual memory is backed by physical RAM
- ▶ Virtual memory is much, much larger than physical RAM
- ▶ Not all virtual memory is backed by RAM, e.g.  



MEMORY MODEL



- ▶ **c)** is vulnerable to Meltdown and Spectre
- ▶ **b)** is vulnerable to Spectre