Completely Fair Scheduler (CFS)

For a perfect (unreal) multitasking CPU

- ► n runnable processes can run at the same time
- ► each process should receive $\frac{1}{n}$ of CPU power

For a real world CPU

- ► can run only a single task at once — unfair
  - ☺ while one task is running
  - ☹ the others have to wait
- ► p->wait_runtime is the amount of time the task should now run on the CPU for it becomes completely fair and balanced.
  - ☺ on ideal CPU, the p->wait_runtime value would always be zero
- ► CFS always tries to run the task with the largest p->wait_runtime value