

Some Definitions

- An Asynchronous Distributed System consists of a number of **processes**
- Each process has a **state** (values of variables).
- Each process takes **actions** to change its state, which may be an **instruction** or a communication action (**send**, **receive**).
- An **event** is the occurrence of an action.
- Each process has a local clock – events *within* a process can be assigned **timestamps**, and thus ordered linearly.
- But – in a distributed system, we also need to know the time order of events *across* different processes.