

Why is it Important?

- Many problems in distributed systems are *equivalent to (or harder than)* consensus!
 - Perfect Failure Detection
 - Leader election (select exactly one leader, and every alive process knows about it)
 - Agreement (harder than consensus)
- So consensus is a very important problem, and solving it would be really useful!
- Consensus is
 - Possible to solve in synchronous systems
 - Impossible to solve in asynchronous systems