

## Exercise Session

### NBAC, TRB

#### Problem 1

Devise two algorithms that, without consensus, implement weaker specifications of NBAC by replacing the termination property with the following ones:

1. Weak termination: Let  $p$  be a distinguished process, known to all other processes. If  $p$  does not crash then all correct processes eventually decide. Your algorithm may use a perfect failure detector.
2. Very weak termination: If no process crashes, then all processes decide. Is a failure detector needed to implement this algorithm?

#### Problem 2

Can we implement TRB with the eventually perfect failure detector  $\diamond P$ , if we assume that at least one process can crash?