

## Exercise Session 8

# View Synchronous Communication

### Problem 1

In this problem we will change the *view-synchronous communication* (VSC) abstraction in order to allow joins of new processes. Answer to the following questions:

1. Are the properties of VSC (as given in the class) suitable to accommodate the joins of new processes. Why / Why not? (Hint: no)
2. Change the properties of VSC, so that they allow for implementations that support the joins of new processes. (Hint: focus on the properties of *group membership*)
3. Sketch the changes we need to perform on the Consensus-based (Algorithm II) implementation of VSC in order to support joins.

### Problem 2

Explain why every process needs to maintain a copy of the register value in the “Majority Voting” algorithm (Either Algorithm 4.2 in the book, or ABD95 algorithm from slides).