

Quiz 2.1: uninitialized queues

The algorithm assumes that the queue is initialized to (winner,loser).

- Can we solve consensus using (initially) empty queues?

Quiz 2.2: consensus power

Show that T&S has **consensus power at most 2**, i.e., it cannot be, combined with atomic registers, used to solve 3-process consensus

Possible outline:

- Consider the *critical bivalent* run R of A : every one-step extension of R is univalent (show first that it exists)
- Show that all steps enabled at R are on the same T&S object
- Show that there are two extensions of opposite valences that some process cannot distinguish