Algorithm – Eventual Leader Detection Ω

Algorithm 1: Monarchical Eventual Leader Detection

Implements:
EventualLeaderDetector, instance Ω.

Uses:
EventuallyPerfectFailureDetector, instance ♦P.

1: upon event ⟨ Init ⟩ do
2: suspected := ∅
3: leader := ⊥
4: upon event ⟨ ♦P, Suspect | p ⟩ do
5: suspected := suspected ∪ {p}
6: upon event ⟨ ♦P, Restore | p ⟩ do
7: suspected := suspected \ {p}
8: upon event ⟨ leader ≠ MAXRANK(Π \ suspected) ⟩ do
9: leader := MAXRANK(Π \ suspected)
10: trigger ⟨ Ω, Trust | leader ⟩