Echo algorithm with extinction

Each *initiator* starts a wave, tagged with its id.

Non-initiators join the first wave that hits them.

At any time, each process takes part in at most one wave.

Suppose a process p in wave q is hit by a wave r:

- if $q < r$, then p changes to wave r
  (it abandons all earlier messages);
- if $q > r$, then p continues with wave q
  (it dismisses the incoming message);
- if $q = r$, then the incoming message is treated according to the echo algorithm of wave q.

If wave p executes a decide event (at p), p becomes the leader.

Worst-case message complexity: $O(N \cdot E)$