ABAs

- Problem

  ➡ impracticality due to state space explosion

  ➡ state space explosion due to reallocations

- Observation

  ➡ verification under GC instead of SMR is unsound

  ➡ discrepancy manifests as ABA

State Space Reduction

- Theorem 1:

  Verifying a data structure under garbage collection is sound,

  if data structure + SMR spec it is free from ABAs.