

Stabilization Protocol

- Concurrent peer joins, leaves, failures might cause loopiness of pointers, and failure of lookups
 - Chord peers periodically run a *stabilization* algorithm that checks and updates pointers and keys
 - Ensures *non-loopiness* of fingers, eventual success of lookups and $O(\log(N))$ lookups w.h.p.
 - Each stabilization round at a peer involves a constant number of messages
 - Strong stability takes $O(N^2)$ stabilization rounds
 - For more see [TechReport on Chord webpage]