

Pointer Race Check

Type system:

→ to establish:

Data structure + **SMR spec** \vdash **Pointer Race Freedom**

→ that is parametrized by the **SMR spec**

→ externalizes shape analysis to a **GC** tool

External Shape Analysis

- Problem
 - ➔ danglingness may depend on shape invariant
 - ➔ type checks bad at finding shape invariants
- Solution
 - ➔ *“don’t try”*
 - ➔ annotate **data structure** with light-weight **annotations**
 - ➔ discharge **annotations** under **garbage collection**
 - ➔ guess&check finds annotations automatically