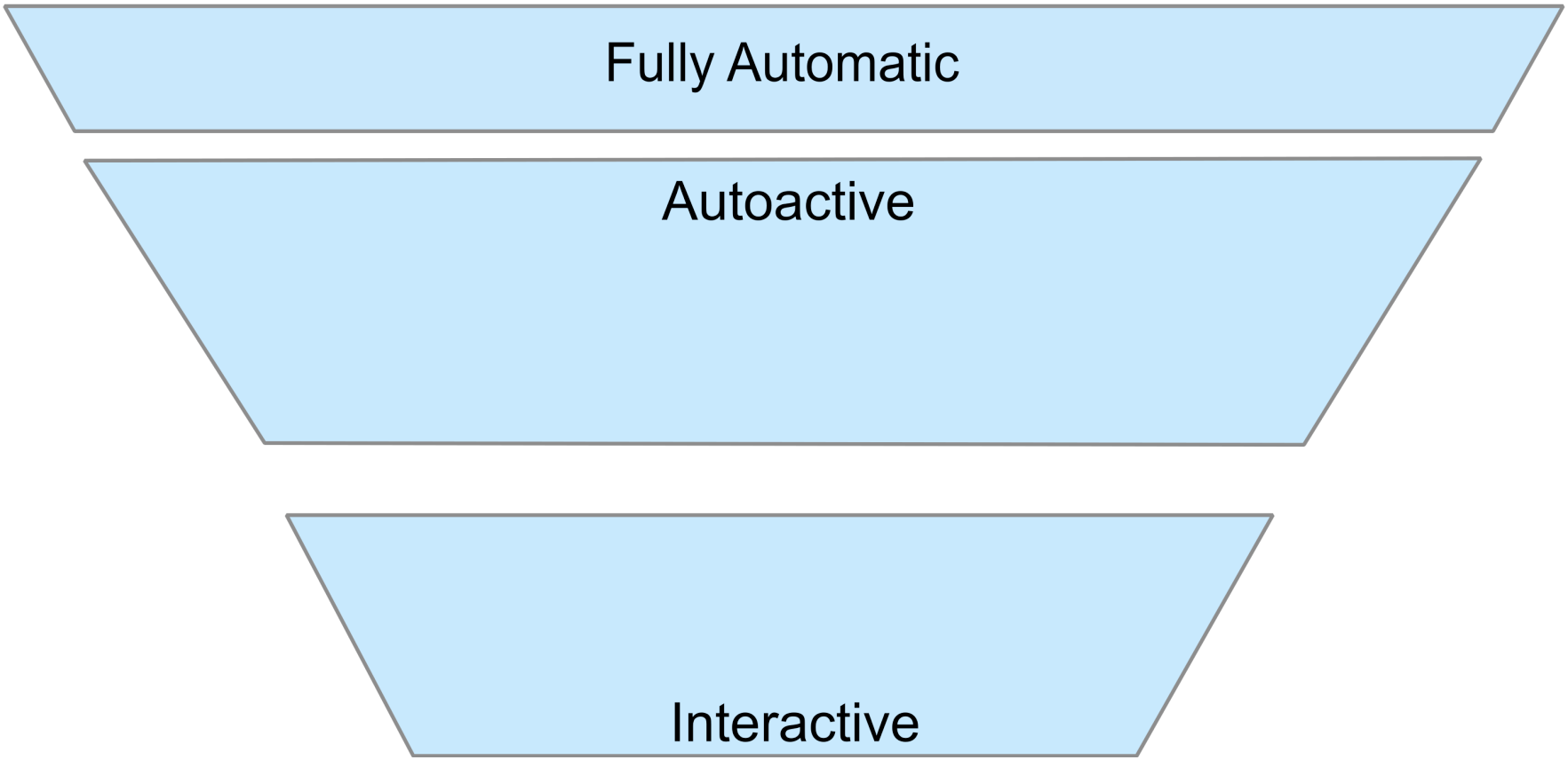
Karlsruher Institut für Technologie

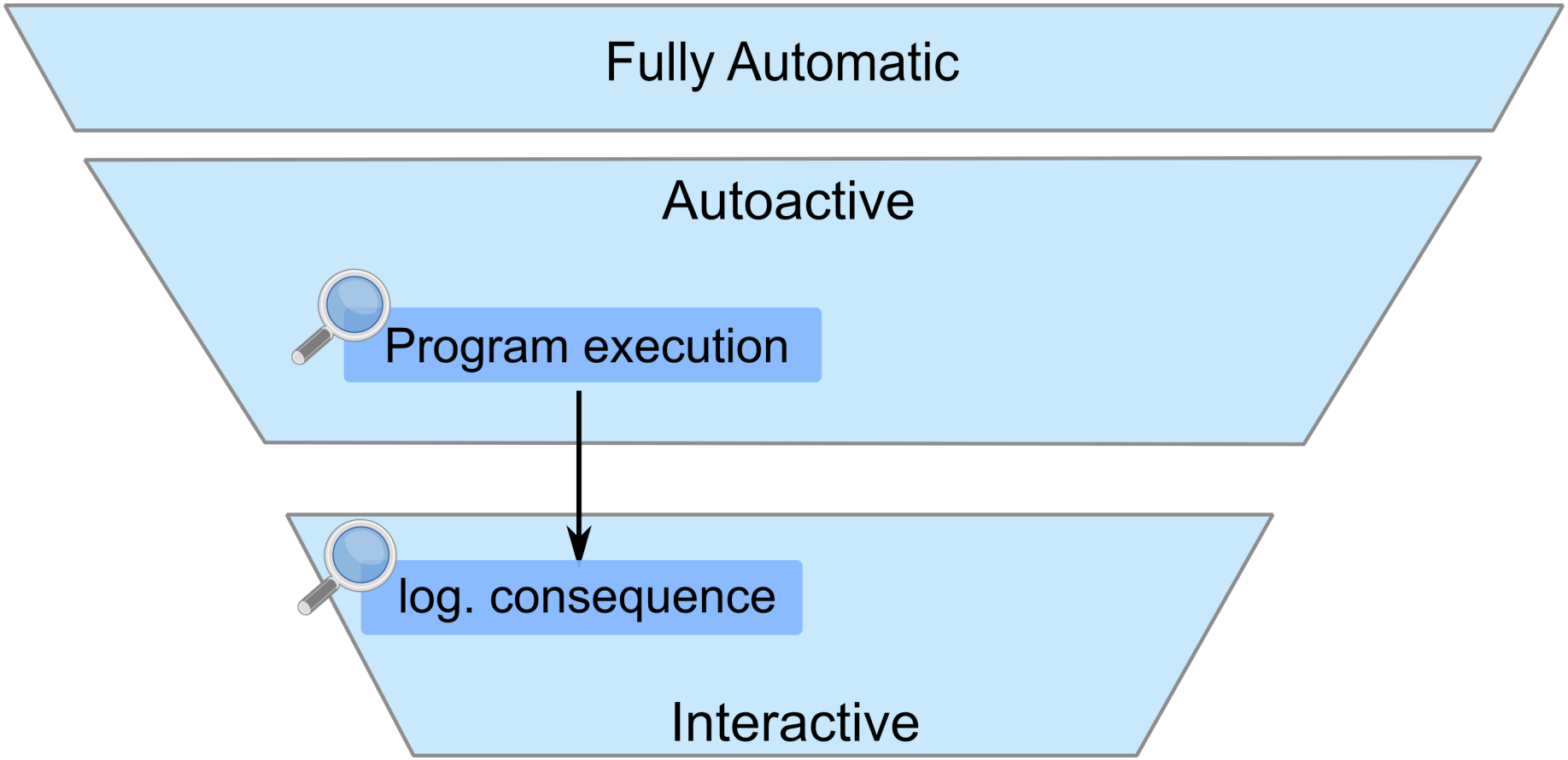
Demo of AlgoVer

Institut für Theoretische Informatik

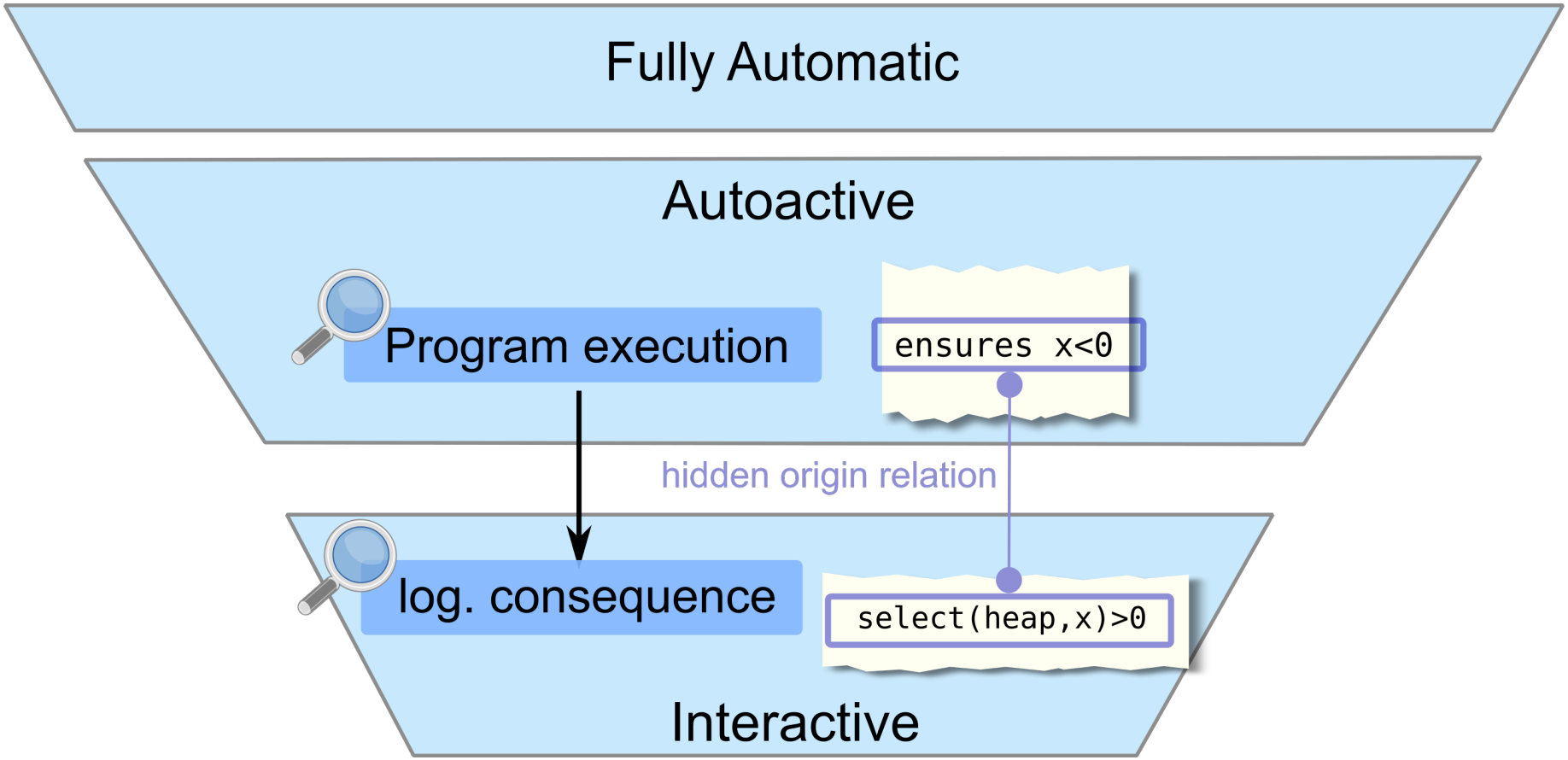
Interactive Program Verification



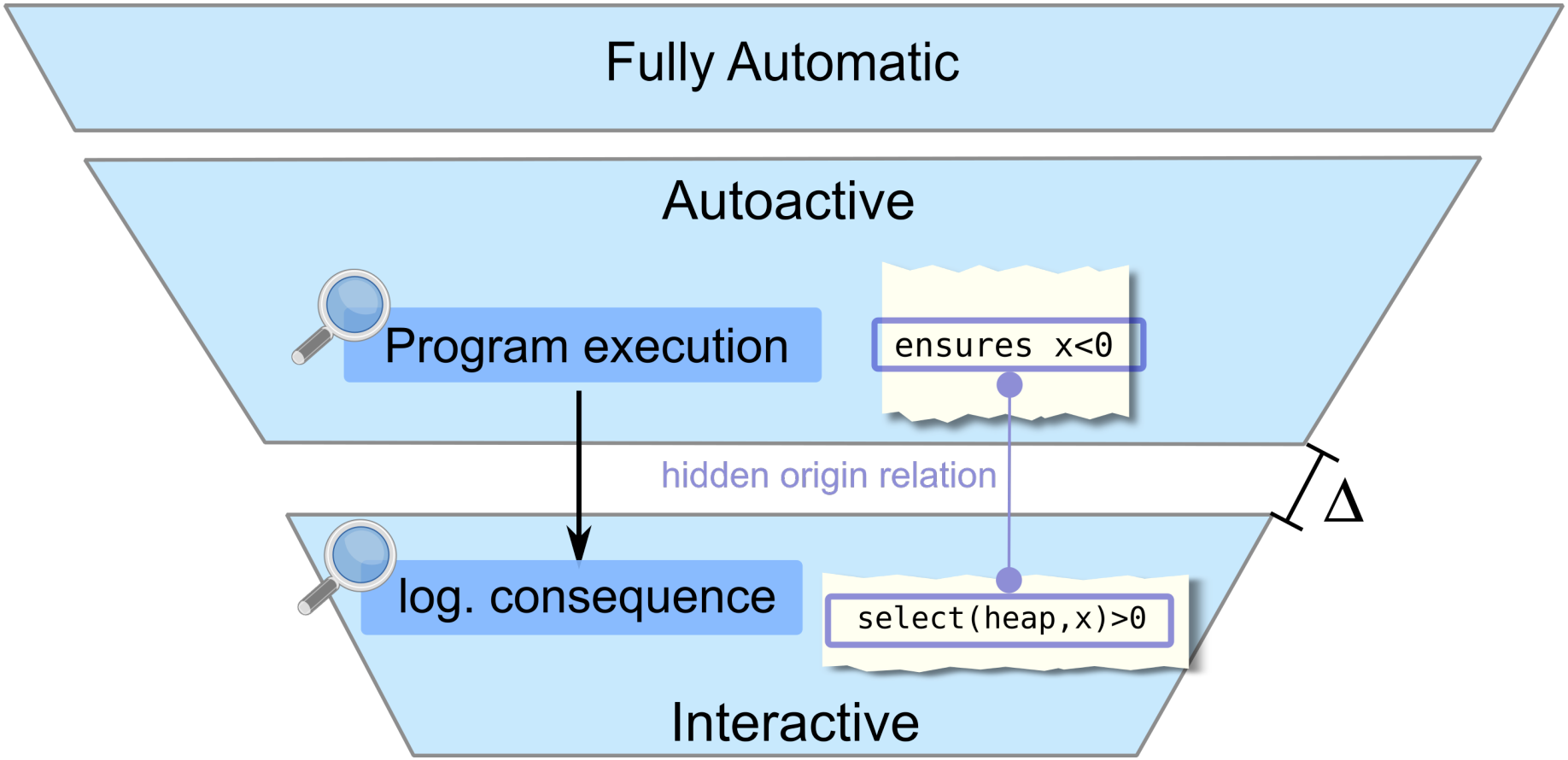
Interactive Program Verification



Interactive Program Verification



Interactive Program Verification



AlgoVer: Seamless Program Verification

- Interactive program verification for Dafny
- Symbolic execution (à la KeY)
- Innovative interaction concepts
- Calling z3
- Bridging the gap between code and proof

Demo

DEMO

Features And Future Work

Features:

- Inspection of different parts of the proof in individual views
- Seamless transition between different views
- Proof construction using
  - direct manipulation
  - script based
  - annotation based

Future Work:

- More rules and strategies
- Improved SMT-support
- Feedback/Interaction back to annotations in source code
- Evaluation on larger examples
- ...