

# **Formal Approach**

## 5. Using formal methods to verify a program

**Static analysis** - analyzing the code to detect security flaws

- Control flow - analyzing the sequence of instructions
  - Data flow - analyzing how the data are accessed
  - Data structure - analyzing how data are organized
- ➔ Abstract interpretation [Cousot]
- ✓ Verification of critical embedded software in Airbus aircrafts