



VerCors

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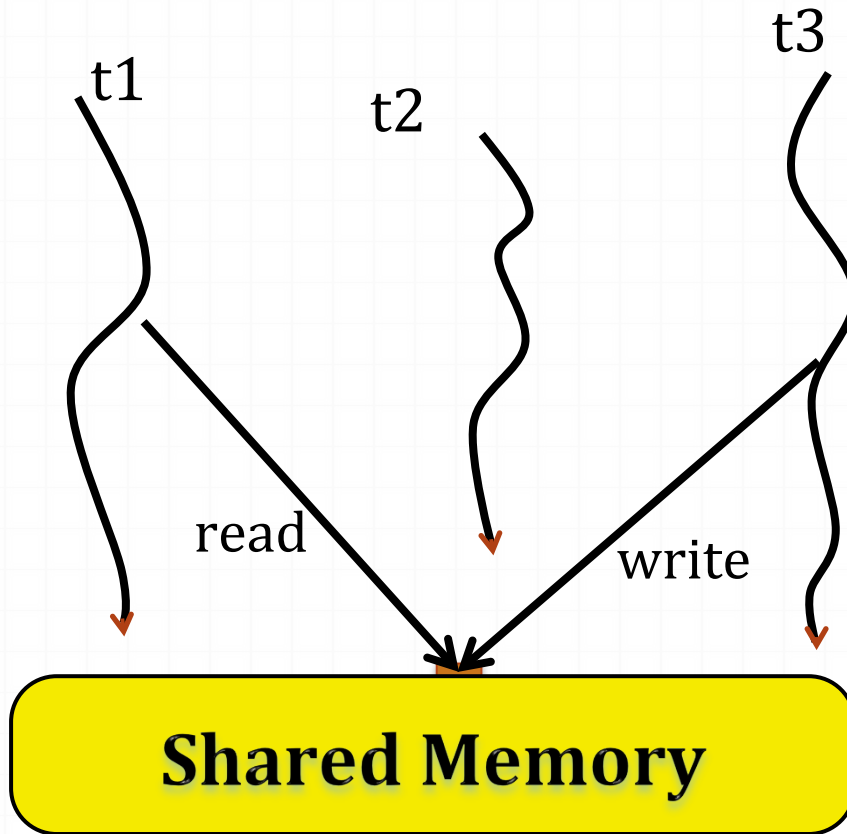
EJCP 2013, Dinard & Rennes 22-31 May 2013

VerCors = Verification of Concurrent Java Programs

Our Team

- Marieke Huisman (Supervision)
- Stefan Blom
- Wojciech Mostowski
- Afshin Amighi
- Marina Zaharieva-Stojanovski

Motivation



- Order?
- Data races

Program Verification

1. Program + Specification
2. Program Logic
3. A Tool

Specification Language

JML
+
Syntax from the Logic
+
Possible Extension

Goal:

- Readable, expressive language

Results:

- Behavioral specifications of queues
- Specifications for Locks, Semaphore, Latch...

Program Logic

1. Permission-based Separation Logic
2. Builds on an existing theory

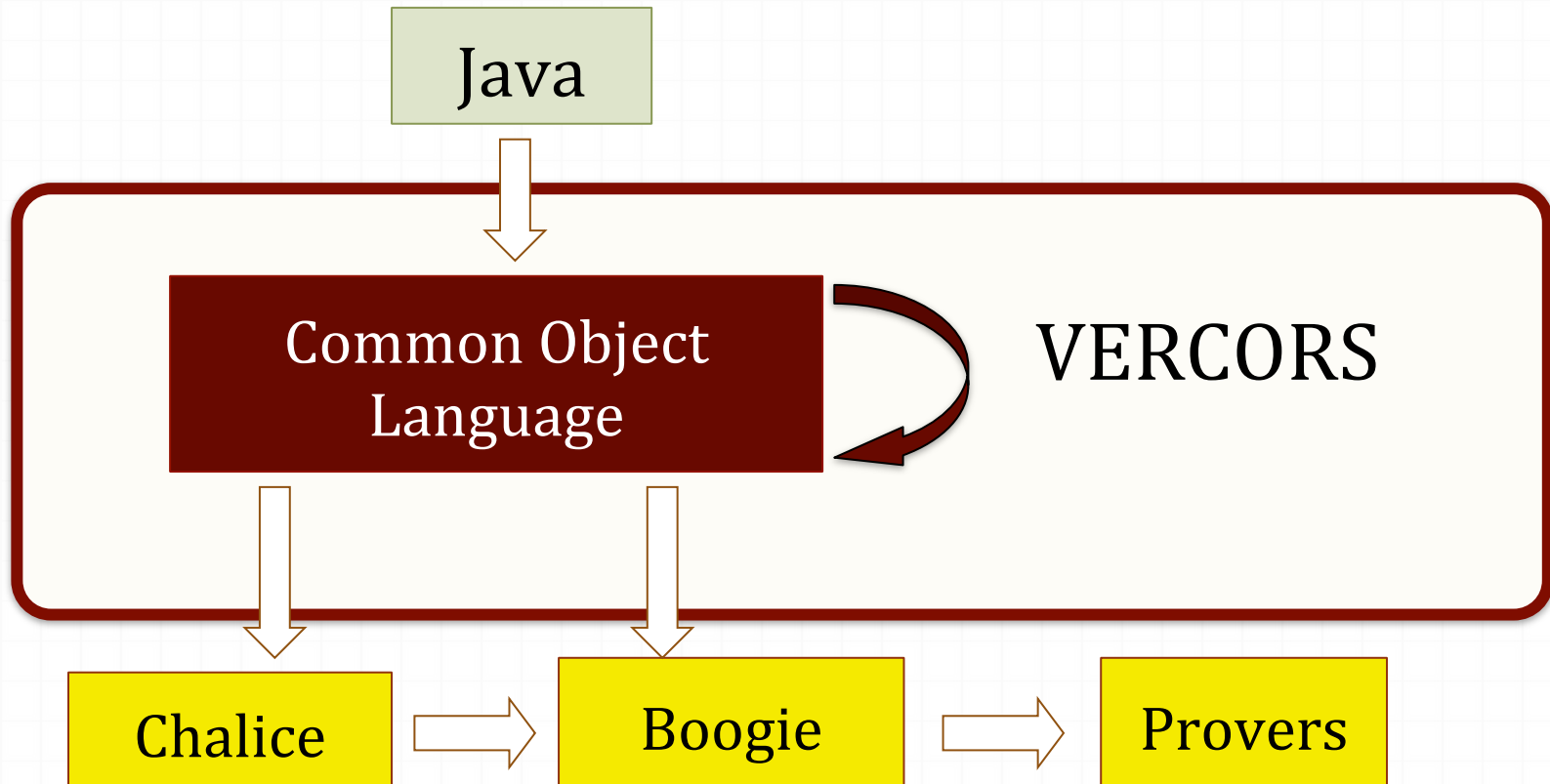
Goal:

- Extend the logic
- New verification techniques

Results:

- Verification technique for object invariants

The VerCors Tool





VerCors