Lecture 20 - Nov. 19

Bridge Controller

Concrete, New Events vs. Abstract skip Livelock, Divergence Invariant vs. Variant Tracing of Abstract/Concrete Transitions

Announcements/Reminders

- Lab5 released (due on Tuesday, December 3)
- WrittenTest2 tomorrow
- Bonus Opportunity coming: Formal Course Evaluation

old events and you events.

PO/VC Rule of **Invariant Preservation**: Sequents



Discharging POs of m1: Invariant Preservation in Refinement



Discharging POs of m1: Invariant Preservation in Refinement







Livelock Caused by New Events Diverging



An alternative m1 (for demonstration)



Invariant us. Variant



Use of a Variant to Measure New Events Converging



Variants for New Events: 2 · a + b

<init, ML_out, ML_out, IL_in, IL_in, IL_out, IL_out, ML_in, ML_in >

concrete events

fixed