



# Practical: Statical Analysis - Automated Bug Hunting and Beyond

## Relational Domains

Alina Weber-H., Rebecca Ghidini, Jennie Harel Liangga, Nicolai Frech, Gabriel Lacknermeier

WS 2023/24  
November 30, 2023

- ▶ Rebecca -> Variable Management
- ▶ Nicolai -> Meet and Join
- ▶ Jennie -> Benchmarking
- ▶ Gabriel -> Overflow
- ▶ Alina -> Coefficient extension

- ▶ Alina: Read coefficient extension and did some implementations for pipeline
- ▶ Rebecca: Implementation Variable Management and assign Texpr
- ▶ Gabriel: Overflow handling in thesis and affineEqualitiesDomain
- ▶ Nicolai: Join and Meet finished
- ▶ Jennie: Further test cases and read into benchmarking

- ▶ Start testing first implementations of analysis and test cases
- ▶ Continue completing the analysis
- ▶ Integration of overflow handling
- ▶ Read more about benchmarking

- ▶ Coefficient extension additional variables. Constants start to be variables???
- ▶ Local variables, e.g. if-else-blocks joined with different local variables in each.
- ▶ Additional functions such as `meets_tcon_one_var_equ()`
- ▶ Equalities structure ok?