

# Proof Complexity and Solving LAB

## Exam Preparation

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<https://github.com/JoshuaBlinkhorn/SAT-LAB>

# Goals

- Implementation of SAT solving algorithms
  - (a) 2-SAT (polynomial time)
  - (b) DPLL
  - (c) CDCL
    - watched literals
    - clause learning
    - decision heuristics
    - restart strategy
  - (d) QBF expansion..
- Practical programming experience
  - use your favourite language (Python, C, C++, Java, ..)
  - recommended: Python

# Basic Exam Preparation

- Main message: **do some preparation**
  - Be familiar with your code
  - Practice command-line demonstrations of your tools
  - Aim to show runtime comparisons between different setups
  - e.g. watched literals versus basic propagation
- **Do not forget:** your laptop and your charger