# Design of an environment for solving pseudo-boolean optimization problems

**GEP:** Final presentation

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## Basic concepts

SAT

(a AND b) OR (NOT c)

\* + !

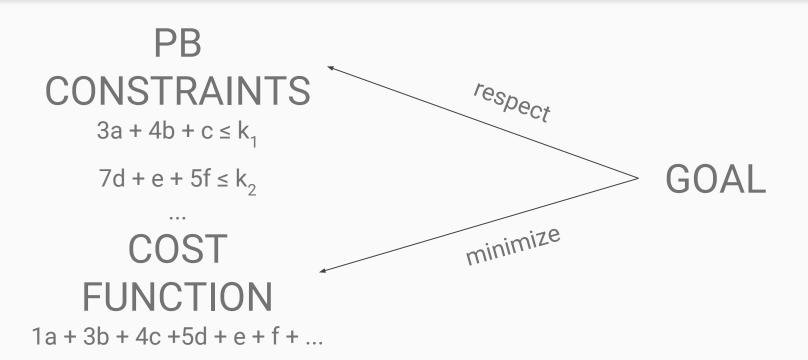
CNF

a OR (NOT c)
AND
b OR (NOT c)

SOLVER

SAT c = True UNSAT

#### Pseudo-boolean minimization



### General objectives

PB minimization

Timeout

Reduce solving time

Multithreading

#### Timeframe

19th of February - 23rd of June

450 hours

GEP (70h)

Initial Stage (90h)

Iteration 1: Pseudo-boolean minimization (80h)

Iteration 2: Timeout (80h)

Iteration 3: Multi-threading (80h) (Optional)

Final Stage (50h)

# Budget

	Cost (€)
Direct Costs	10.015
Indirect Costs	140,73
Contingency	3.025,61
Unforeseen	816,14
Total	13.997,48

# Thank you for your time

Questions?