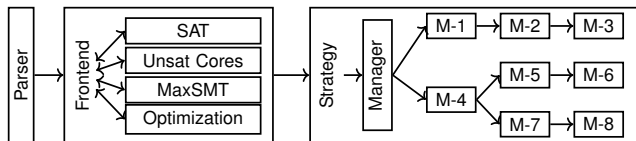
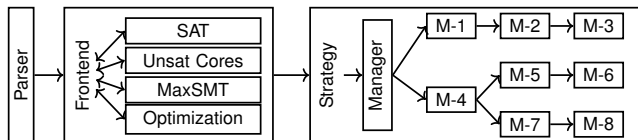


# SMT-RAT 21.05



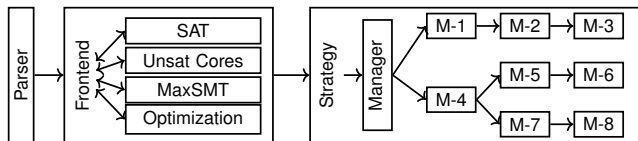
## SMT-RAT 21.05



## ► SMT-RAT strategy

- **SAT solver**: minisat adapted for less-lazy SMT solving
- **non-linear arithmetic**: subtropical satisfiability, interval constraint propagation, virtual substitution and cylindrical algebraic decomposition
- **non-linear integer arithmetic**: bit-blasting and branch&bound

## SMT-RAT 21.05



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## ► SMT-RAT-MCSAT strategy

- MCSAT module based on minisat
- Fourier-Motzkin, interval constraint propagation, virtual substitution, one-cell construction, NLSAT-style model based projections
- novel variant of the one-cell construction (not published yet)