cvc5 at the SMT Competition 2021

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~~CVC4~~ cvc5

- Preview of upcoming release in fall 2021
- Support for all standardized SMT-LIB theories
- User-friendly API, significant refactoring of internals
- Complete rewrite of proof module

New Features/Improvements

- New subsolver for non-linear arithmetic based on cylindrical algebraic coverings using libpoly
- New bit-vector solver, integrating efficient SAT solvers, e.g., CaDiCaL, with $CDCL(\mathcal{T})$
- Syntax-guided quantifier instantiation
- New decision heuristic with optional prioritization of assertions involved in conflicts

Configurations

cvc5 entered all divisions in all tracks.

- Single query track: Sequential portfolio
- Unsat-core track: Based on new proof module and assumptions in the SAT solver

Follow the development: https://cvc5.github.io/