## CVC4 at the SMT Competition 2019

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## **Divisions**

This year's configuration of CVC4 enters all divisions in all tracks.

## **New Features/Improvements**

- Eager bit-blasting solver:
  - New version of CaDiCaL with support for incremental solving
  - Support for incremental eager bit-blasting with CaDiCaL as backend (QF\_BV)
  - Not using ABC anymore
  - Fewer consistency lemmas in Ackermannization preprocessing pass
- String solver: better heuristics, more aggressive rewriting, more efficient reductions of extended operators
- Floating-point solver: new version of SymFPU (primarily bug fixes)

## **Configurations**

- Industry Challenge Track and Model-Validation Track: Same configurations as Single Query Track
- Unsat-Core Track: Fixed last year's configuration that had errors on QF\_UFBV