

# Alt-Ergo @ SMT-Comp 2018

- ▶ based on version 2.2.0 presented by Albin yesterday,
- ▶ improve triggers inference, in particular for multi-triggers,
- ▶ allow/propagate more triggers in the backend,
- ▶ improve handling of Let-In,
- ▶ enable additional heuristics before returning **unknown**,
- ▶ **experimental** : enable a kind of first-order resolution
- ▶ **experimental** : SAT detection in some situations
- ▶ add the ability to run several strategies in parallel

<https://github.com/OCamlPro/alt-ergo>

- ▶ a prototype I developed during my thesis to validate our work published at IJCAR'2012
  - ▶ Simplex-based Fourier-Motkzin procedure to decide QF\_LIA
- ▶ pre-processing for QF\_LIA **Let-In** and **Ite** expressions
- ▶ general Simplex for QF\_LRA
- ▶ mini-SAT based SAT solver
- ▶ extended to be able to run several strategies in parallel

<https://gitlab.com/OCamlPro-Iguernlala/Ctrl-Ergo>