

# mc<sup>2</sup> — a mcSAT solver

- **Implementation of mcSAT in OCaml** (descendant of msat/alt-ergo zero)
- **< 7kloc total**
- **Theories:**
  - Uninterpreted functions
  - LRA (conflict-driven Fourier Motzkin)
  - Boolean formulas via Tseitin encoding
- **<https://github.com/c-cube/mc2>** (Apache license)
- **Basic calculus, not much in way of simplifications**
  - Naturally good at diamond problems
  - Decent performance on QF\_UFLRA (hyp: theory combination is cheap in mcSAT?)
- **Currently not incremental**