

Quantifier Free
Arrays

$$b = a[i \triangleleft v] \\ a[v] = v$$

Quantifier Free
Uninterpreted Functions

$$f(b) = v \\ f(a) \neq v$$

Quantifier Free
Linear Arithmetic

$$y \leq i + 1 \\ i \leq y \\ y - \text{to_int}(y) < .3$$

Theory combination

$$b[i] \geq i \\ f(i + y) = 2v \\ f(b) \leq i$$

sat

model

SMTInterpol

interpolants

unsat

proof

unsat core

<http://ultimate.informatik.uni-freiburg.de/smtinterpol>