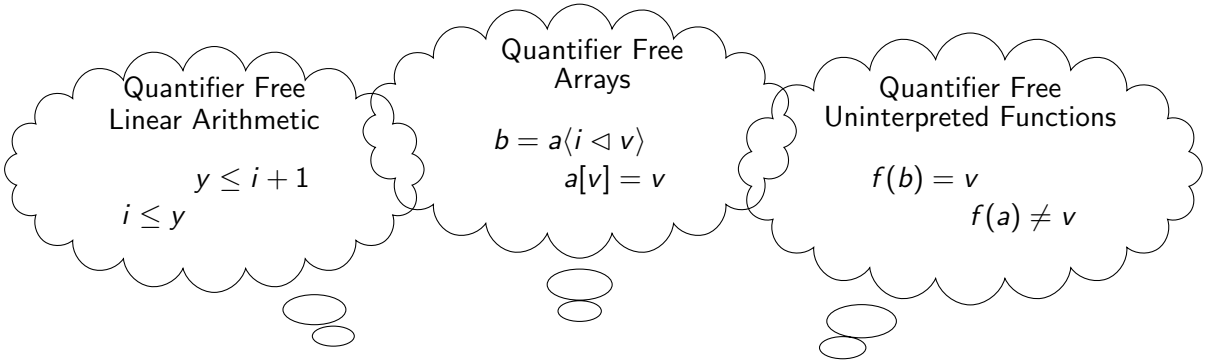
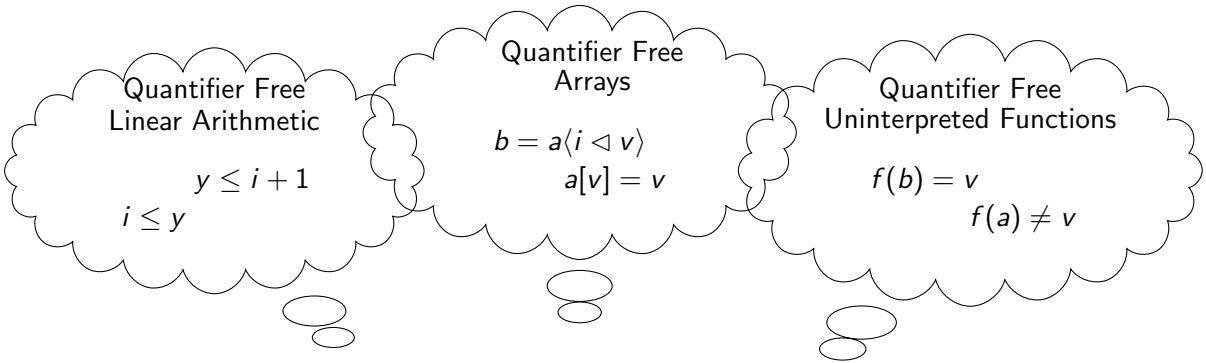


SMTInterpol

decides **S**atisfiability **M**odulo **T**heory
computes Craig **Interpol**ants

`http://ultimate.informatik.uni-freiburg.de/smtinterpol`



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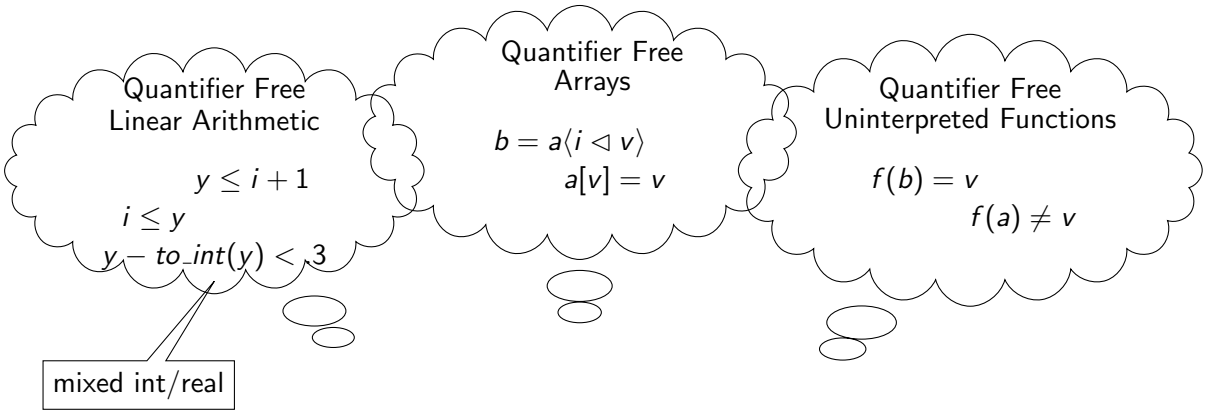

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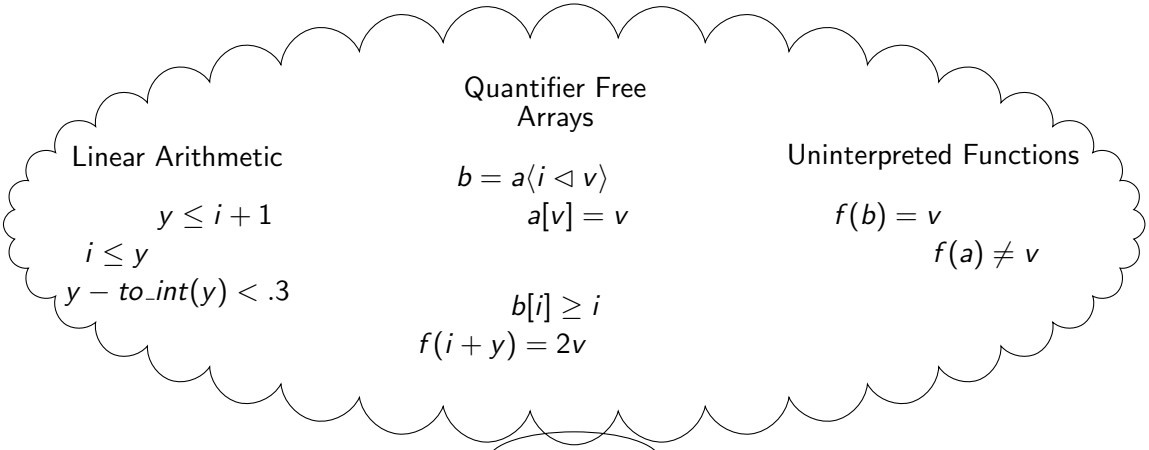

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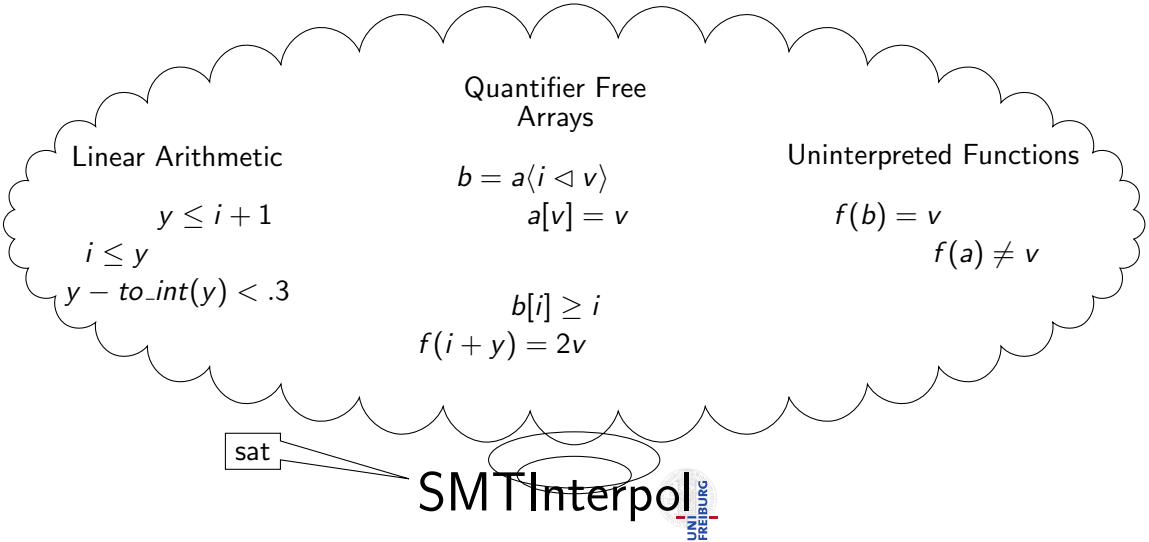

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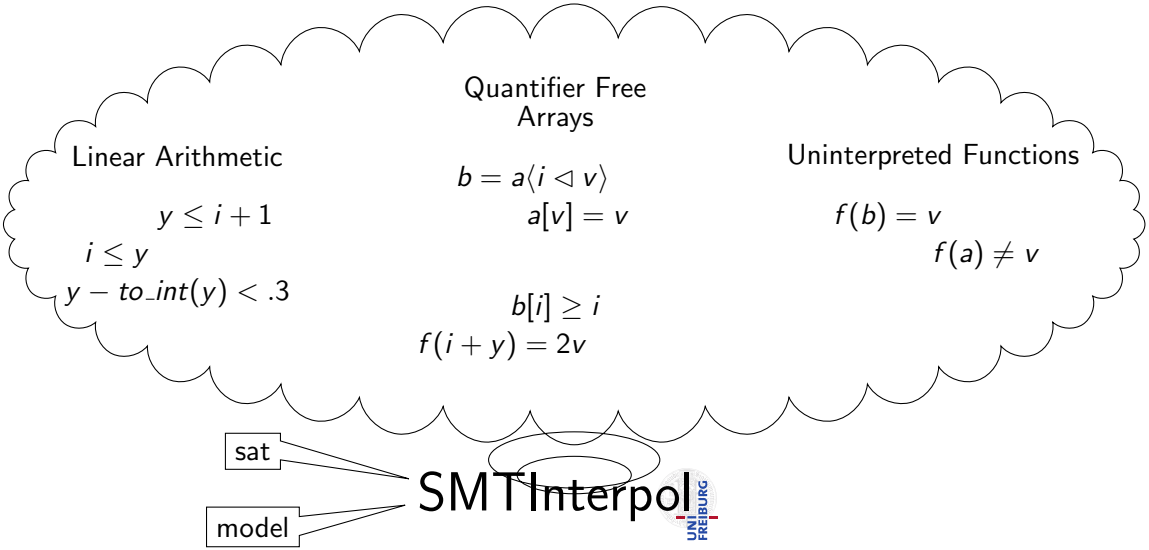

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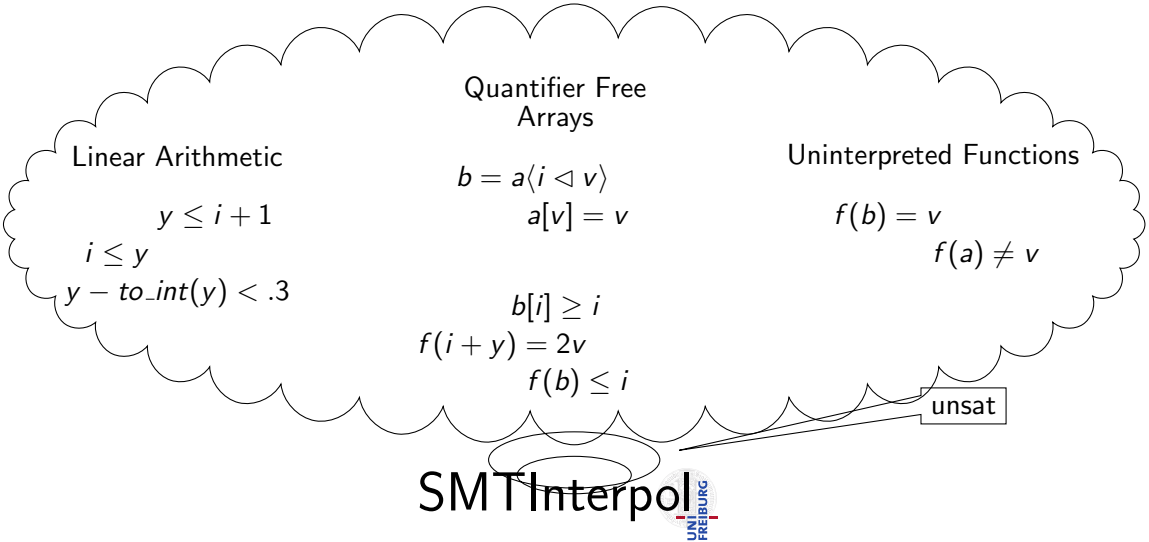

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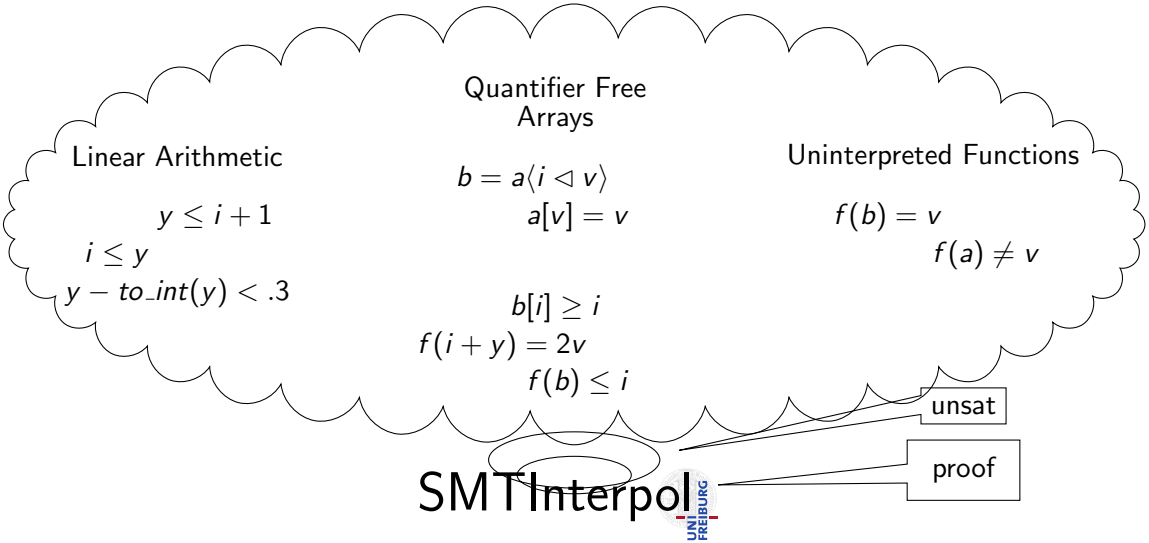

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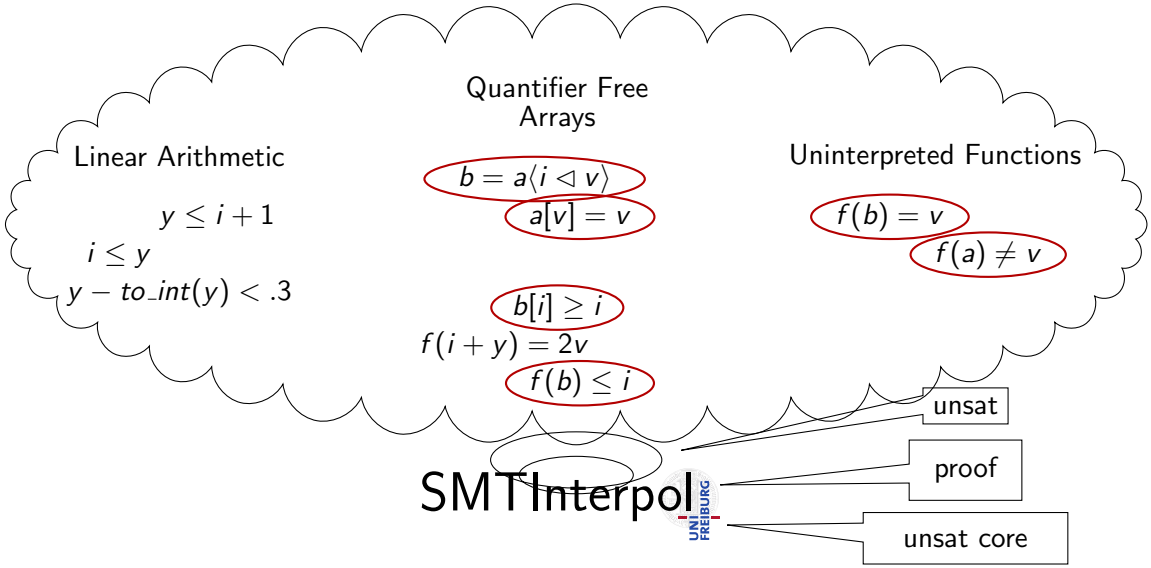

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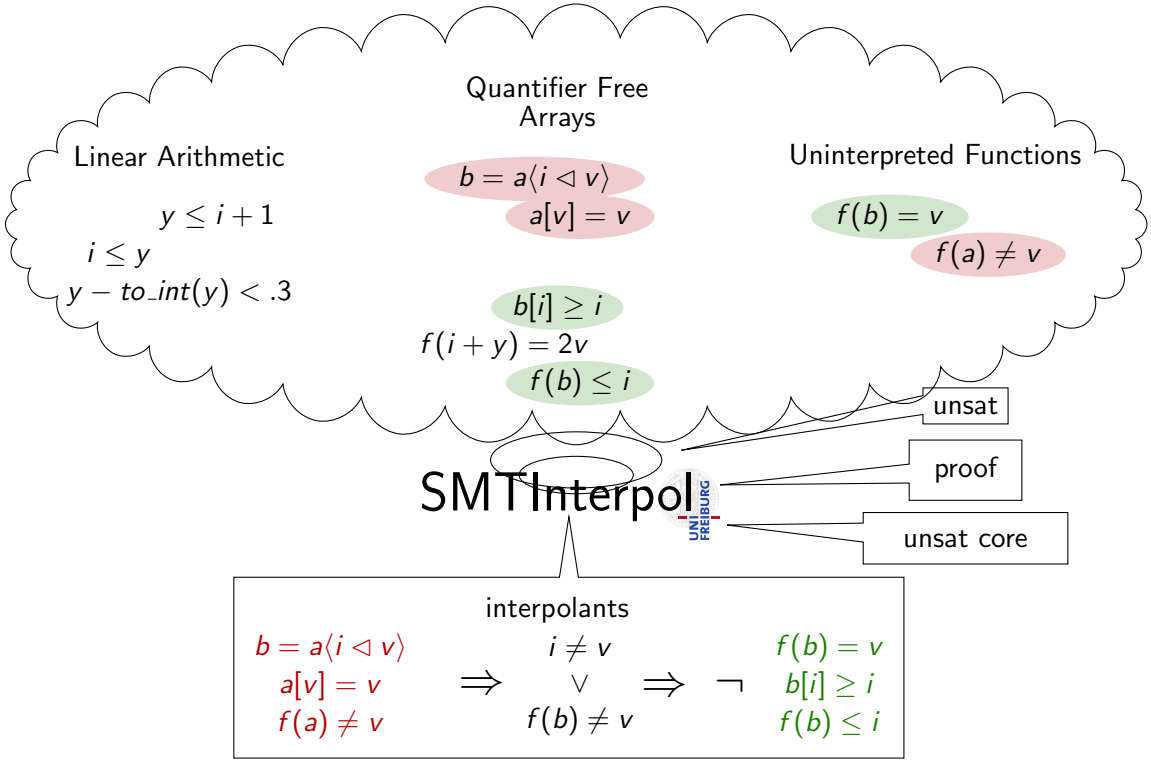
Quantifier Free Arrays
Linear Arithmetic
$y \leq i + 1$
$i \leq y$
$y - to\_int(y) < .3$
$b = a\langle i \lhd v \rangle$
$a[v] = v$
$b[i] \geq i$
$f(i + y) = 2v$
$f(b) \leq i$
Uninterpreted Functions
$f(b) = v$
$f(a) \neq v$
unsat
proof
unsat core
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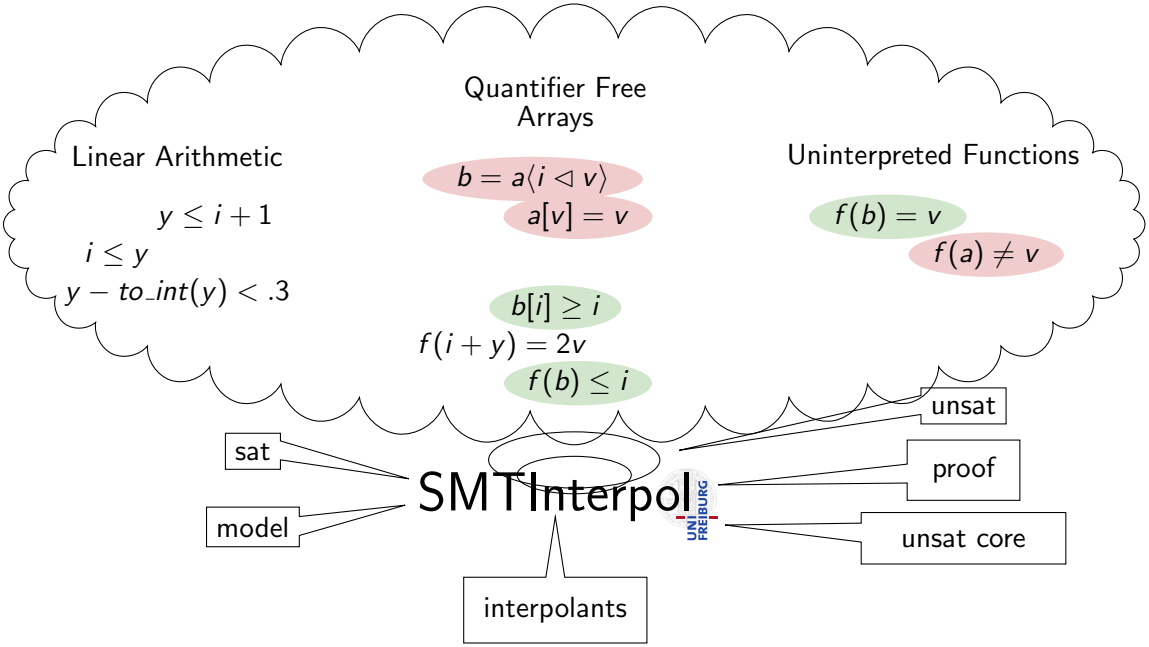
interpolants
$b = a\langle i \lhd v \rangle$
$a[v] = v$
$f(a) \neq v$
$\Rightarrow$
$i \neq v$
$\vee$
$f(b) \neq v$
$\Rightarrow$
$\neg$
$f(b) = v$
$b[i] \geq i$
$f(b) \leq i$



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