

Approximations for Deciding Quantified Floating-Point Constraints

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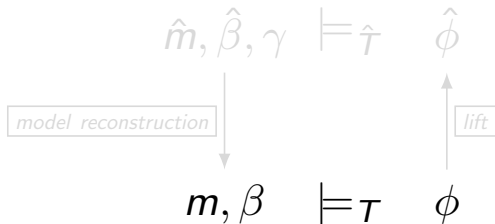
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- Model construction is a challenging problem (e.g., FPA)
- Especially in presence of quantifiers
- Relevant applications (e.g., automatic test-case generation)

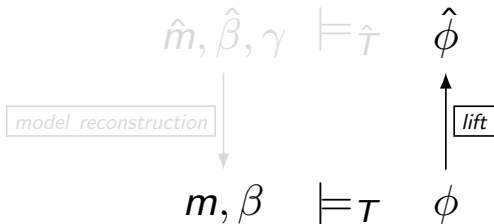
Approximations for Model Construction — Zeljić et al. IJCAR'14

- Quantifier-free constraints
- Uses approximations of any form
- Instantiated for floating-point arithmetic



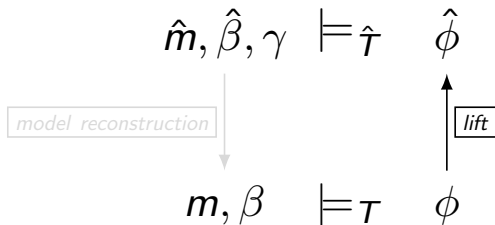
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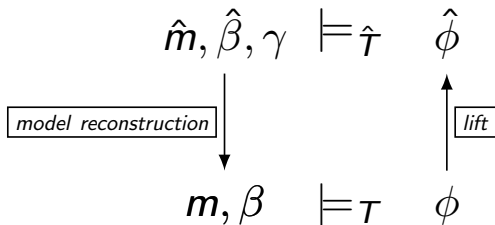
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- Compact representation of Skolem functions
- Informed reduction of the quantified domain
- Generalization of Skolem functions