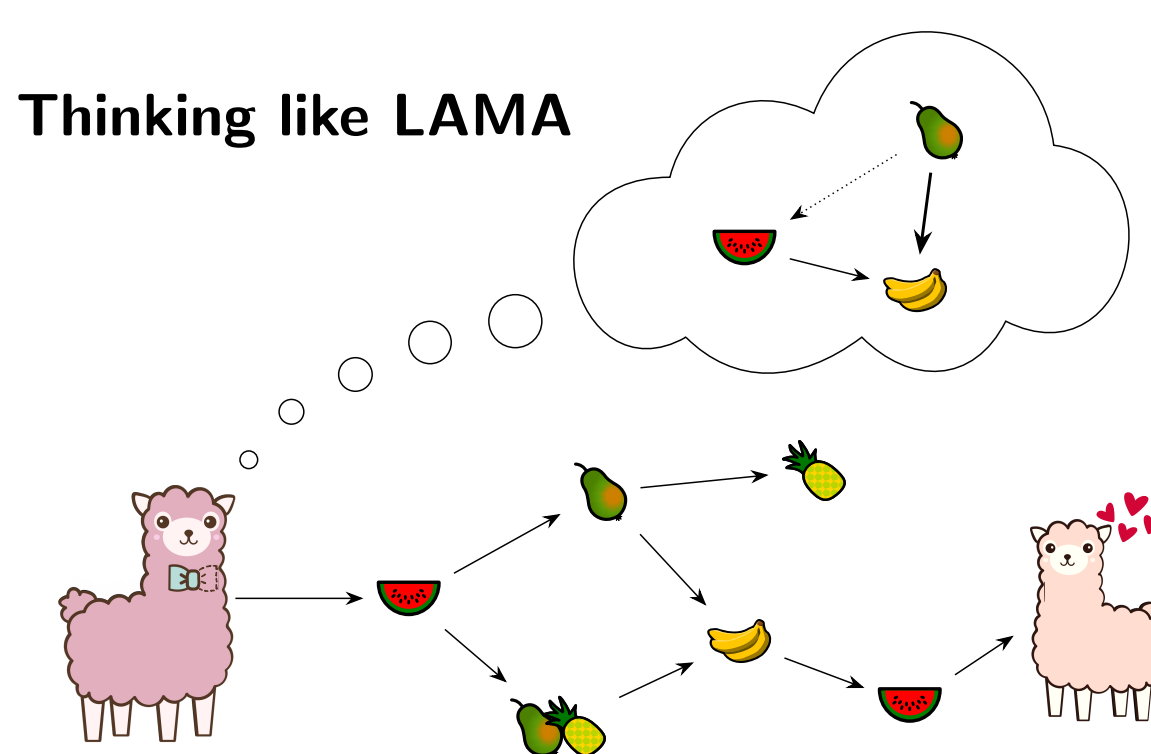


LAMA IS INCOMPLETE

AND WE SHOW HOW TO FIX IT!



Thinking like LAMA

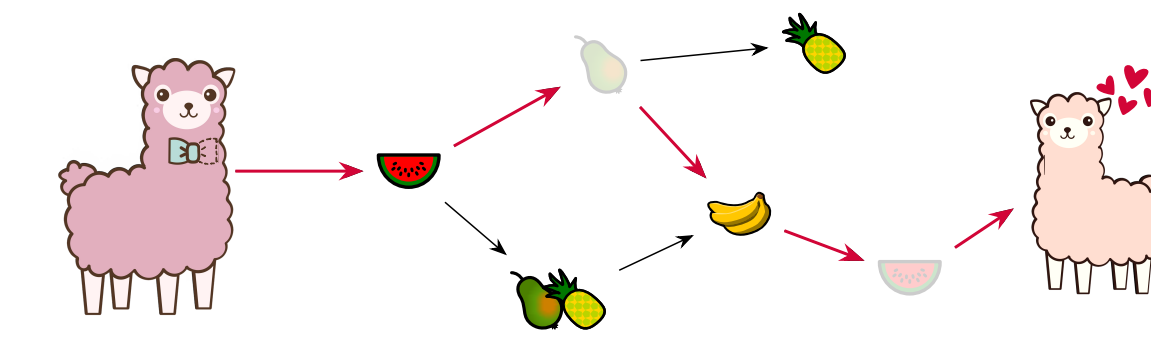


Landmark heuristic: How many fruits not eaten.

LAMA's Interpretation of Orderings

For all orderings $A \rightarrow B$, ignore B until A .

~ e.g., eat  only after 



Problem: LAMA reaches goal without eating .

~ Landmark heuristic inaccurate.

Valid Landmark Progression

Remember which fruits to eat again in the future.

~ Store past and future landmarks.

Basic rule Eat fruits whenever you can. ~ past

Advanced rules for orderings

Do not eat  before . (natural \rightarrow)

~ Detect dead-end's.

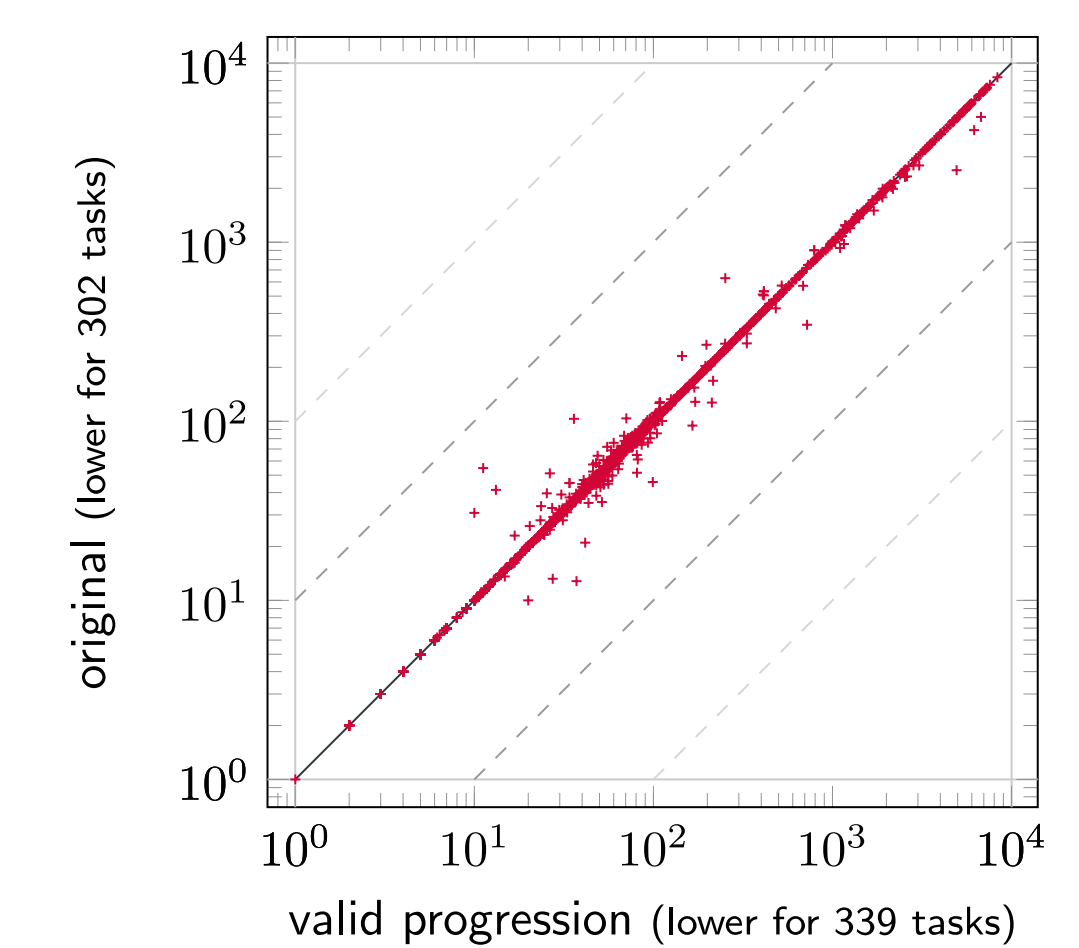
Eat first  immediately after . (greedy-necessary \rightarrow)

~ Set  future until  is past.

Eat last  after first . (reasonable \rightarrow)

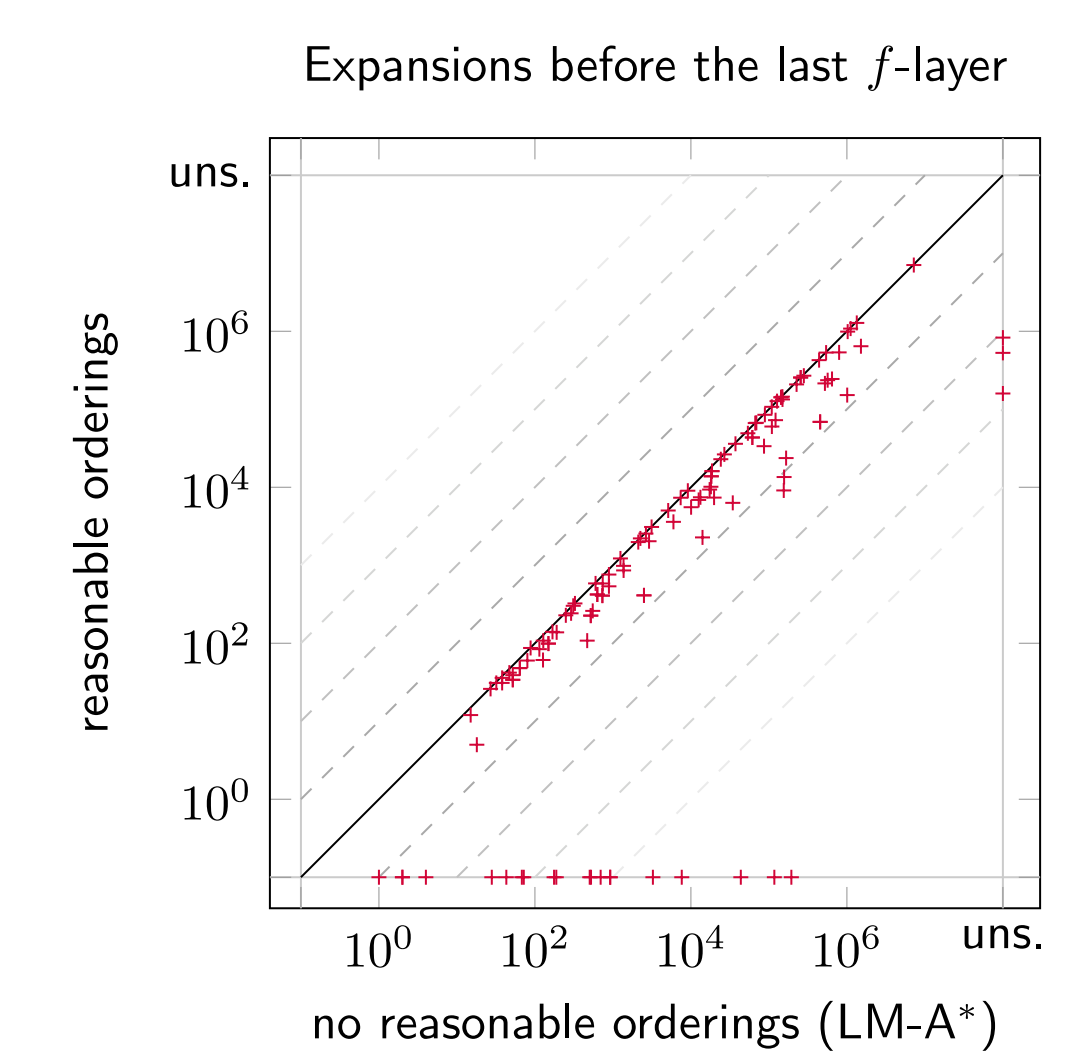
~ Set  future while  not past.

LAMA: Similar Coverage and Plan Quality

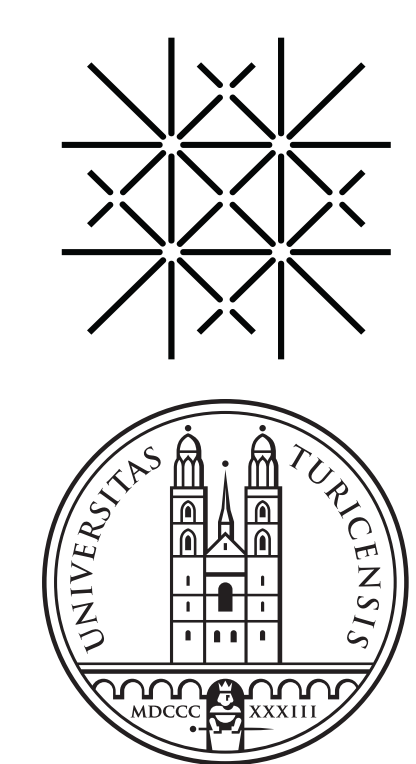


Optimal Planning: Fewer Expansions

Reasonable orderings admissible for optimal planning!



LANDMARK PROGRESSION IN HEURISTIC SEARCH
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