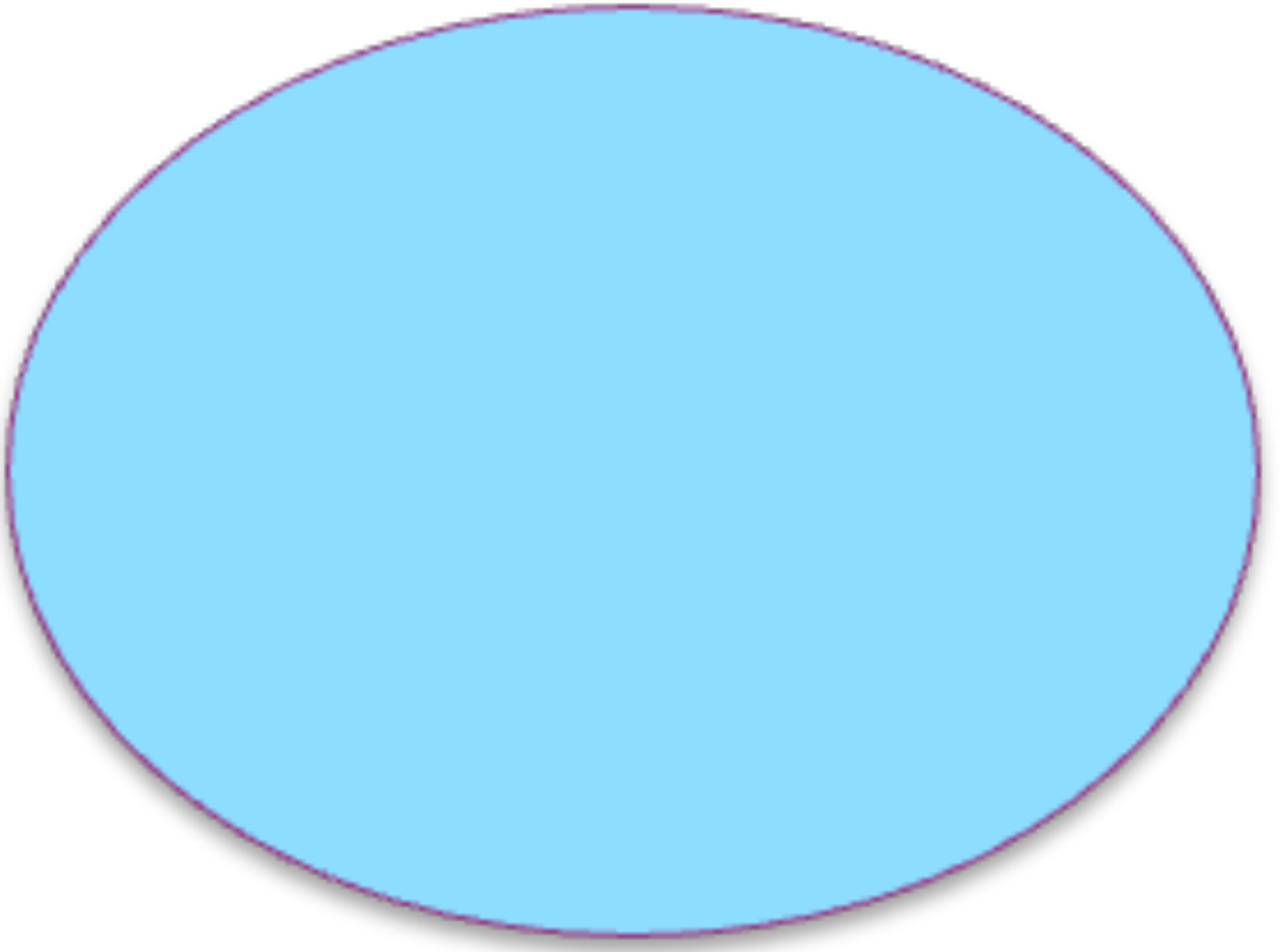
Temporal Logic Inference



Positive Traces (P)

Negative Traces (*N*)

Sample $S = P \cup N$

Minimal TL formula φ

(system executions)

The decision problem is NP-hard for LTL[1,2].

1. B. Bordais, D. Neider, R. Roy (STACS'25): The Complexity of Learning LTL, CTL and ATL Formulas

2. N. Fijalkow, G. Lagarde (ICGI'21): The complexity of learning linear temporal formulas from examples

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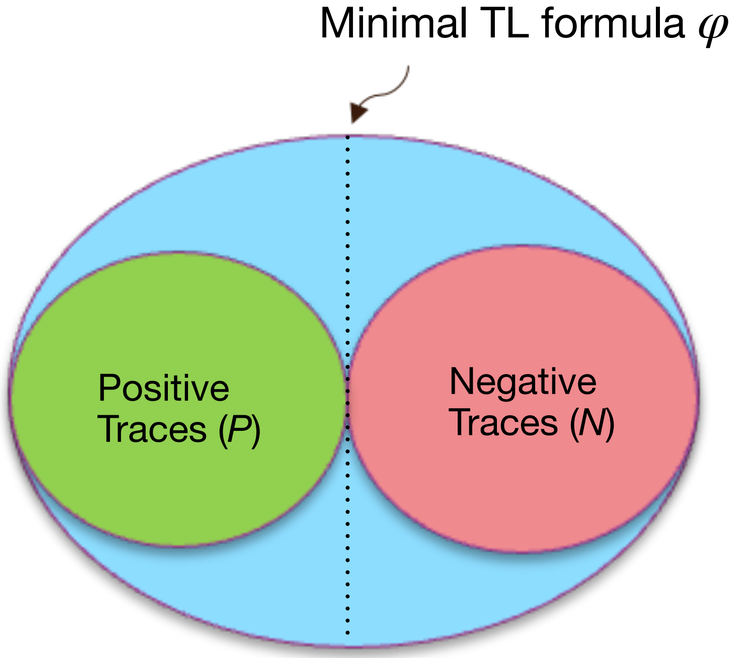

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(system executions)

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The General Solution Idea