

CoLL: **C**ommutation Tool for **L**eft-**L**inear TRSs

$\{(\mathcal{R}, \mathcal{S})\}$

CoLL

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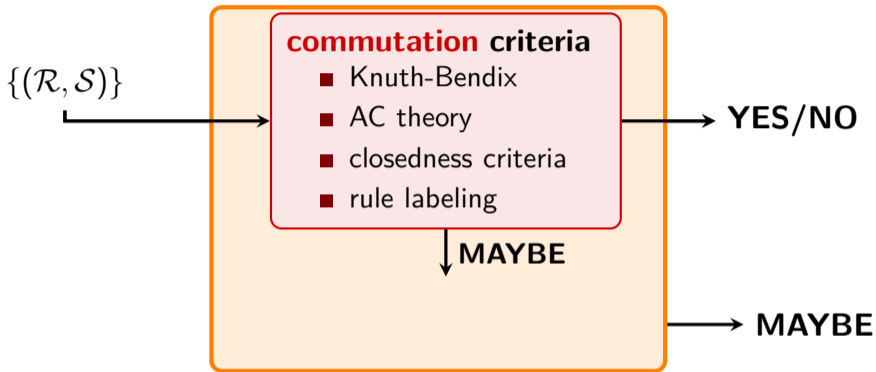
version: 1.6.1

code: OCaml (6000 LoC)

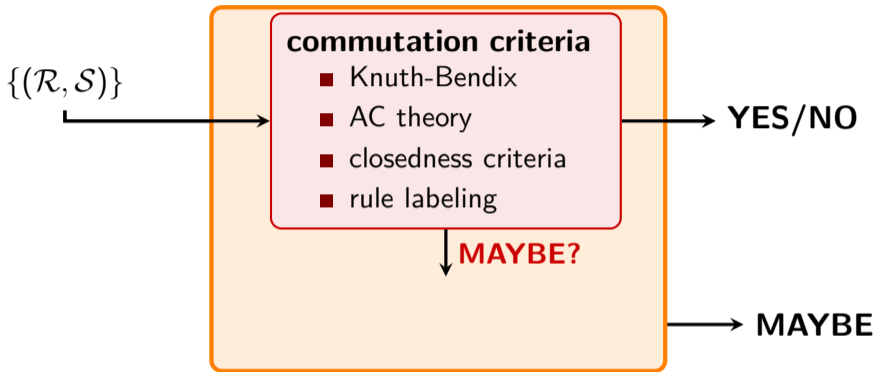
→ YES/NO

→ MAYBE

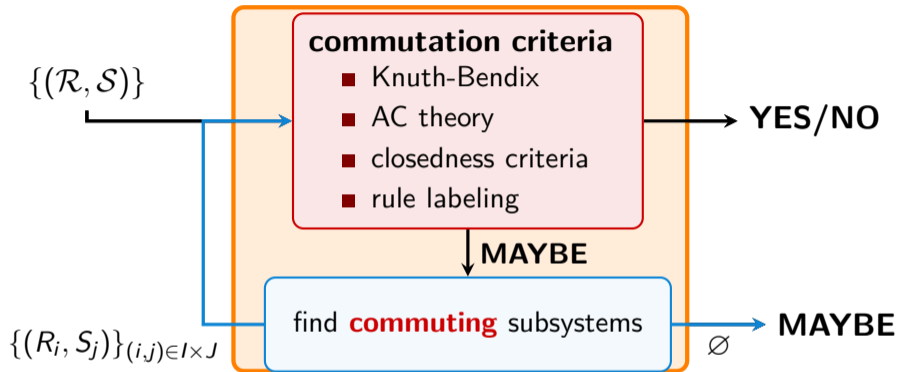
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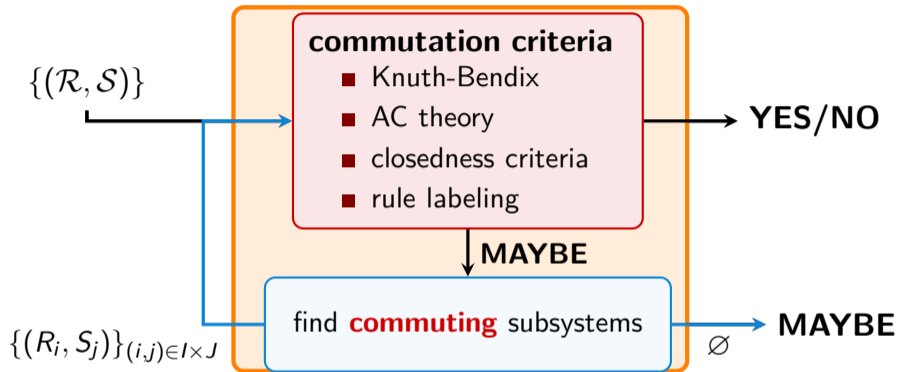
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Theorem (Hindley 1964)

$\bigcup_{i \in I} \mathcal{R}_i$ and $\bigcup_{j \in J} \mathcal{S}_j$ commute if \mathcal{R}_i and \mathcal{S}_j commute for all $i \in I$ and $j \in J$

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► **left-linearity** is often essential for commutation! ◀