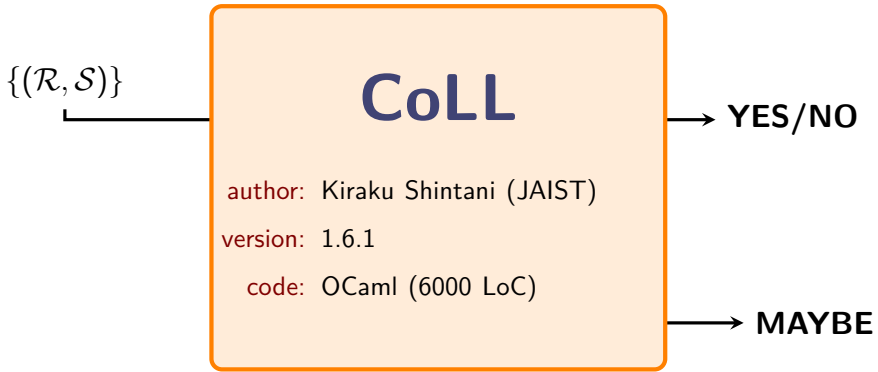
CoLL: Commutation Tool for Left-Linear TRSs



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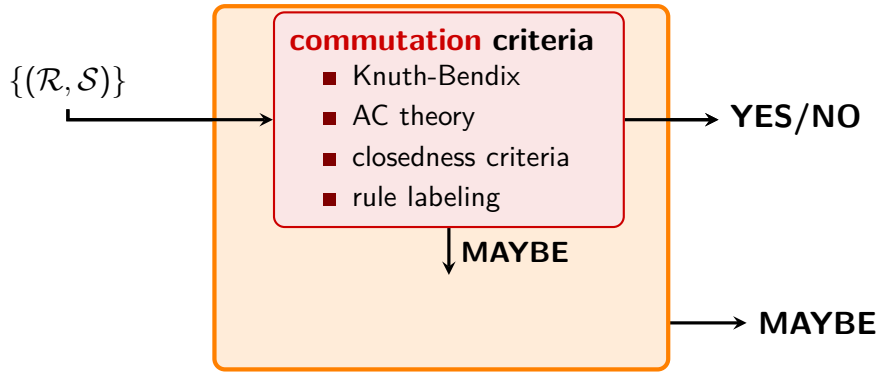

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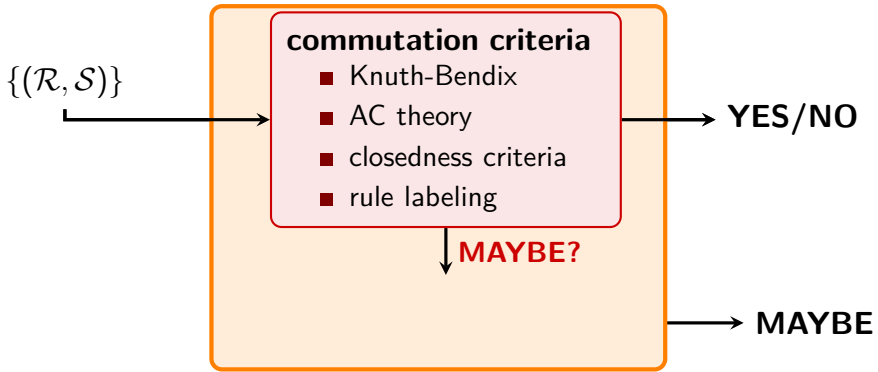

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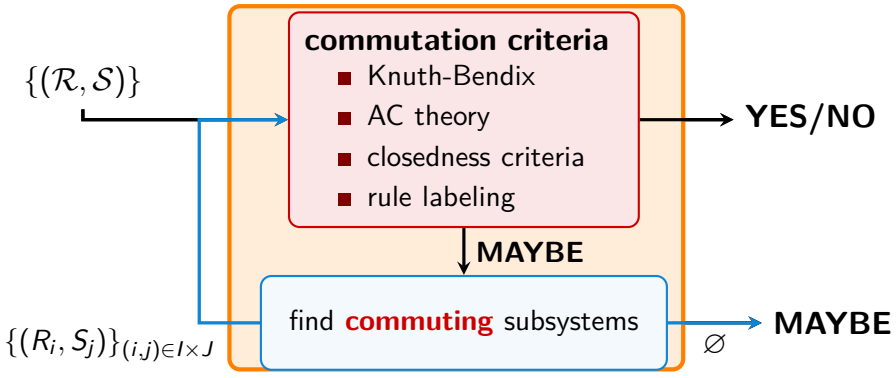

Theorem (Hindley 1964)

$\bigcup_{i\in I} \mathcal{R}_i$ 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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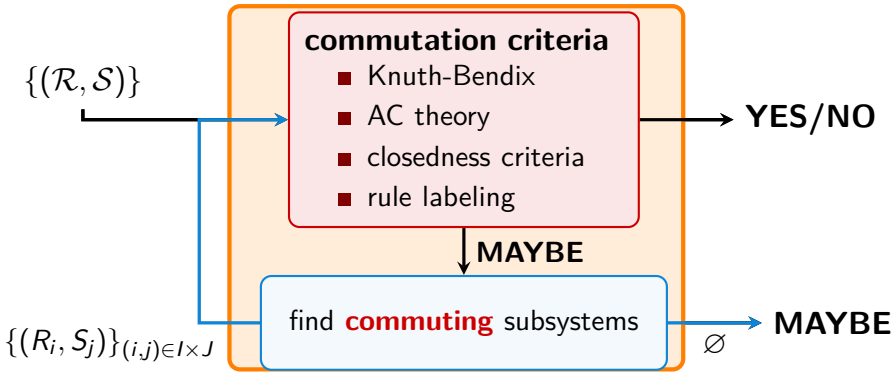

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▶ left-linearity is often essential for commutation! ◀