



CoCo 2023 Participant: CeTA 2.45

René Thiemann, Christina Kohl, and Dohan Kim

CeTA 2.45



- CeTA: certifier of various properties, verified in Isabelle/HOL
- developed by Computational Logic Group in Innsbruck
- several confluence techniques supported, see a complete list at:

http://cl-informatik.uibk.ac.at/software/ceta/

- new techniques in CeTA 2.45 in comparison to 2022
 - almost development closed TRSs are confluent (van Oostrom)
 - techniques relying on parallel critical pairs
 (criteria of Gramlich and Toyama, rule labeling, compositional versions of Shintani and Hirokawa)
 - support for commutation

 (almost development closed, (compositional) parallel critical pair criteria)
 - support for non-commutation (non-joinable peaks)