

CONFident at the 2025 Confluence Competition*

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1 Overview

CONFident is a tool which is able to prove confluence of TRSs, CS-TRSs, CTRSs and CS-CTRSs. The tool is available here:

<http://zenon.dsic.upv.es/confident/>.

It is written in Haskell implementing the Confluence Framework. We implement the processors using the logical approach presented in [1, 3, 6] and mechanizing them by external tools like MU-TERM [3], infChecker [1, 5], AGES [2], Prover9 and Mace4 [8] and Barcellogic¹.

In 2025, CONFident was enhanced with the new techniques implemented in infChecker, improved with some relations needed in [7] and now supports the ARI format natively.

References

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¹<https://barcellogic.com/>