CRaris (Ver. 1.1)
a **CR** checker for LCTRSs in **ARI s**tyle

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Overview

CRaris, which is a part of Crisys2, proves confluence of LCTRSs written in ARI style

- Crisys2 is a rewriting-induction tool for LCTRSs

Supported SMT-LIB Theories

`Core`, `Ints`, `FixedSizeBitVecotrs`

Implemented Confluence Criteria

- weak orthogonality (left-linearity + triviality of CPs) [Kop and Nishida, 2013]
- termination + triviality of CPs [Schöpf and Middeldorp, 2023]

Implemented DP Processors for Termination

- SCC processor
- singleton self-looping removal processor for BV-LCTRSs [Matsumi et al, 2023]

- Added a disproof criterion by means of logical-variable CPs $\langle x, y \rangle$ $[\varphi]$ [Ver. 1.1]