# CRaris
### 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 Termination Criteria

DP framework for LCTRSs [Kop, 2013] with

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