

Craig Interpolation within the Landscape of Decidable Fragments of First-Order Logic (Invited Talk)

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Abstract

Motivated by applications of Craig interpolation in computer science, I will discuss some recent work pertaining to the Craig interpolation property (CIP) for various important decidable fragment of first-order logic, including guarded fragments, finite-variable fragments, and ordered fragments. Most of these fragments lack the CIP. We will discuss strategies that have been proposed to deal with this lack of CIP, as well as results that shed light on where, within the landscape of decidable fragment of first-order logic, one may find logics that enjoy CIP.

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