

Definitions and (Uniform) Interpolants in First-Order Modal Logic

Agi Kurucz , Frank Wolter, and Michael Zakharyashev

We consider some decidable fragments of first-order modal logics that do not enjoy the Craig interpolation or projective Beth definability properties, and so the existence of interpolants and explicit definitions of predicates do not directly reduce to the validity problem. Our concern is the computational complexity of deciding whether (uniform) interpolants and definitions exist for given input formulas.