

Title:

Bisimulations for logics for strategies

Abstract

The notion of bisimulation is of central importance in the study of process or modal logics, as it frequently allows characterizing the expressive power of a logic within a class of Kripke models. Recently some extensions of modal logics like Alternating-time Temporal Logics or Strategy Logics have been proposed for dealing with strategic aspects in multi-agent models. We present some recent work and work in progress towards the characterization of the expressive power of these logics with the aid of appropriate notions of bisimulations. The talk will give a variety of definitions of bisimulations between multi-agent systems and an even larger variety of counterexamples of bisimilar systems that do not satisfy the same formulas in one of the strategy logics under consideration.