Propositional Dynamic Logic with Petri net programs: A discussion and a logical system

Edward Hermann Haeusler (joint work with Mario Benevides and Bruno Lopes)

Department of Informatics of PUC-Rio, Brazil

Petri nets are regarded as one of the first presented approaches to true concurrency. Dynamic Logic, on the other side, usually takes into account sequential programs. That is, the modalities are $[\Pi]$, where Π is a sequential program. In this talk we discuss and present the Propositional Dynamic Logic that can be obtained when one considers Petri Nest instead of sequential programs as modalities. That is, the propositional Dynamic Logic obtained when the modalities are of the form $[\Pi]$, where Π is a Petri net.