Hyperreal Probabilistic Computational Tree Search
Valeria Elisabeth Schmidt
Master thesis in Computer Science
We present a logic based on CTL with the addition of real time and a hyperreal probability measure. It is used to state properties such as "There exists an infinitely small possibility that a service will never be carried out". The formulas are interpreted over finite discrete time Markov chains. We give a model checking algorithm that controls if a formula is satisfiable in a given Markov chain.
Prof. Thomas Studer