

Extensions of Hyper Tableaux

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At Jelia 1996 Hyper Tableaux were introduced as a first order calculus which combined ideas from hyper resolution and tableaux calculi. The first part of this talk reviews a number of extensions, which are implemented in the prover E-KRHyper. One of them incorporates efficient equality handling by the use of an adapted version of the well known superposition inference rule. Other extensions include a form of negation as failure, PROLOG-like data structures and arithmetic and a unique name assumption. By using a transformation from the description logic *SHIQ* to DL-clauses the prover E-KRHyper can also be used as a decision procedure for *SHIQ*. The second part of the talk depicts the embedding of E-KRHyper within the natural language question answering system loganswer.de. We discuss the requirements which stem from such a time critical and knowledge intensive application, and we discuss how such a system can be evaluated.