## Vítězslav Švejdar On sequent calculi for intuitionistic propositional logic

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**Abstract:** The well-known Dyckoff's 1992 calculus/procedure for intuitionistic propositional logic is considered and analyzed. It is shown that the calculus is Kripke complete and the procedure in fact works in polynomial space. Then a multi-conclusion intuitionistic calculus is introduced, obtained by adding one new rule to known calculi. A simple proof of Kripke completeness and polynomial-space decidability of this calculus is given. An upper bound on the depth of a Kripke counter-model is obtained.

 ${\bf Keywords:}$  intuitionistic logic, polynomial-space, sequent calculus, Kripke semantics

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