

情報電子工学科 学会発表

学会名	The 6th International Workshop on Logic, Rationality, and Interaction (LORI 2017)
演題名	An extended first-order Belnap-Dunn logic with classical negation
発表者	Norihiro Kamide, Hitoshi Omori
内容	In this paper, we investigate an extended first-order Belnap-Dunn logic with classical negation. We introduce a Gentzen-type sequent calculus FBD+ for this logic and prove theorems for syntactically and semantically embedding FBD+ into a Gentzen-type sequent calculus for first-order classical logic. Moreover, we show the cut-elimination theorem for FBD+ and prove the completeness theorems with respect to both valuation and many-valued semantics for FBD+.