情報電子工学科　論文発表

題名	An extended first-order Belnap-Dunn logic with classical negation
掲載雑誌	Lecture Notes in Computer Science 10455, pp. 79-93, Springer, 2017.
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概　要	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+.