

情報電子工学科 論文発表

題名	A decidable paraconsistent relevant logic: Gentzen system and Routley-Meyer semantics
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著者	Norihiro Kamide
概要	In this paper, the positive fragment of the logic RW of contraction-less relevant implication is extended with the addition of a paraconsistent negation connective similar to the strong negation connective in Nelson's paraconsistent four-valued logic N4. This extended relevant logic is called RWP, and it has the property of constructible falsity which is known to be a characteristic property of N4. A Gentzen-type sequent calculus SRWP for RWP is introduced, and the cut-elimination and decidability theorems for SRWP are proved. Two extended Routley-Meyer semantics are introduced for RWP, and the completeness theorems with respect to these semantics are proved.