

情報電子工学科 論文発表

題名	Intuitionistic De Morgan verification and falsification logics
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概要	<p>In this paper, two new logics called intuitionistic De Morgan verification logic DV and intuitionistic De Morgan falsification logic DF are introduced as a Gentzen-type sequent calculus. The logics DV and DF have De Morgan-like laws with respect to implication and co-implication. These laws are analogous to the well-known De Morgan laws with respect to conjunction and disjunction. On the one hand, DV can appropriately represent verification (or justification) of incomplete information, on the other hand DF can appropriately represent falsification (or refutation) of incomplete information. Some theorems for embedding DV into DF and vice versa are shown. The cut-elimination theorems for DV and DF are proved, and DV and DF are also shown to be paraconsistent and decidable.</p>