情報電子工学科　論文発表

題名	Modal multilattice logic
掲載雑誌	Logica Universalis 11(3), pp. 317-343, Springer, 2017.
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概　要	A modal extension of multilattice logic, called modal multilattice logic, is introduced as a Gentzen-type sequent calculus MMLn. Theorems for embedding MMLn into a Gentzen-type sequent calculus S4C (an extended S4-modal logic) and vice versa are proved. The cut-elimination theorem for MMLn is shown. A Kripke semantics for MMLn is introduced, and the completeness theorem with respect to this semantics is proved. Moreover, the duality principle is proved as a characteristic property of MMLn.