

情報電子工学科 論文発表

題名	Embedding from multilattice logic into classical logic and vice versa
掲載雑誌	Journal of Logic and Computation 27 (5), pp. 1549-1575, Oxford University Press, 2017.
著者	Norihiro Kamide and Yaroslav Shramko
概要	This article presents some theorems for syntactic and semantic embeddings of a Gentzen-type sequent calculus ML_n for multilattice logic into a Gentzen-type sequent calculus LK for classical logic and vice versa. These embedding theorems are used to prove cut-elimination, decidability and completeness theorems for ML_n , as well as a modified Craig interpolation theorem. Some of these results are then extended to the first-order system FML_n with implications and co-implications.