情報電子工学科 論文発表

題名	Paraconsistent double negation that can simulate classical negation
揭載雑誌	Proceedings of the 46th IEEE International Symposium on Multiple-Valued Logic (ISMVL 2016), pp.131-136, 2016, IEEE Press
著者	Norihiro Kamide
概要	A new classical paraconsistent logic (CP), which is a variant of Nelson's paraconsistent four-valued logic, is introduced as a Gentzen-type sequent calculus. The logic CP can simulate the classical negation in classical logic by paraconsistent double negation in CP. Some theorems for syntactically and semantically embedding CP into a Gentzen-type sequent calculus LK for classical logic and vice versa are proved. The cut-elimination and completeness theorems for CP are also shown using these embedding theorems.