研究室名

題名	Symmetric paraconsistent quantum logic
揭載雑誌	Proceedings of the 51st IEEE International Symposium on Multiple-Valued Logic (ISMVL 2021), pp. 26-32, IEEE Press, 2021.
著者	Norihiro Kamide(上出哲広研究室)
概要	In this study, a new logic called symmetric paraconsistent quantum logic (SPQL) is introduced as a dual monosequent system, which is a restricted and indexed sequent calculus. The logic SPQL is regarded as an extension and generalization of Dalla Chiara and Giuntini's paraconsistent quantum logic (PQL). Theorems for syntactically and semantically embedding SPQL into PQL and vice versa are proved. Additionally, cut-elimination, symmetry-elimination, contraposition-elimination, and algebraic-completeness theorems are proved for SPQL.