研究室名	上出哲広研究室　論文発表

題名	Modal extension of ideal paraconsistent four-valued logic and its subsystem
掲載雑誌	Annals of Pure and Applied Logic, Online first, Elsevier, 2020.
著者	Norihiro Kamide and Yoni Zohar
概要	This study aims to introduce a modal extension M4CC of Arieli, Avron, and Zamansky's ideal paraconsistent four-valued logic 4CC as a Gentzen-type sequent calculus and prove the Kripke-completeness and cut-elimination theorems for M4CC. The logic M4CC is also shown to be decidable and embeddable into the normal modal logic S4. Furthermore, a subsystem of M4CC, which has some characteristic properties that do not hold for M4CC, is introduced and the Kripke-completeness and cut-elimination theorems for this subsystem are proved. This subsystem is also shown to be decidable and embeddable into S4.