

情報電子工学科工学科 論文発表

題名	Decidable temporal and sequential relevant logics (Journal of Logic and Computation 28 (2), pp. 403-432, Oxford University Press, 2018)
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概要	<p>A Gentzen-type sequent calculus STRW is introduced for a new temporal relevant logic TRW, which is obtained from the positive contraction-less relevant logic RW+ by adding temporal operators. A Gentzen-type sequent calculus SSRW is also introduced for a new sequential relevant logic SRW, which is obtained from RW+ by adding a sequence modal operator. The SSRW sequence modal operator is regarded as a generalization of the standard next-time temporal operator and can suitably represent sequential information. The cut-elimination and completeness theorems for STRW and SSRW are proved, and STRW and SSRW are shown to be decidable and have relevance principle.</p>