

Zolin E. E. “Sequent reflexive non-contingency logics”.

**Abstract:** Hilbert-style axiomatic systems  $L^\triangleright$  and sequent calculi  $[L^\triangleright]$  are presented for versions of the modal logics  $L = \mathbf{T}, \mathbf{S4}, \mathbf{B}, \mathbf{S5}$ , and  $\mathbf{Grz}$  with the non-contingency operator  $\triangleright A = \Box A \vee \Box \neg A$  taken as the sole modal primitive. Cut elimination does not hold for the calculi  $[L^\triangleright]$ , nevertheless the Cut rule can be restricted to its analytic instances, which preserve the subformula property. Wherefore, the calculi  $[\mathbf{T}^\triangleright], [\mathbf{S4}^\triangleright], [\mathbf{S5}^\triangleright]$  (resp.,  $[\mathbf{Grz}^\triangleright]$ ) possess the (resp., weak) subformula property (for  $[\mathbf{B}^\triangleright]$ , the question remains open). Craig interpolation property is established for the non-contingency logics under consideration.

*Keywords:* modal logic, non-contingency logic, sequent calculus.