

# Modal logic of $T_0$ -spaces.

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The aim of the paper is to study the topological modal logic of  $T_0$  spaces, with the difference modality (for  $T_n$ , where  $n \geq 1$  the corresponding logics were known). We consider propositional modal logic with two modal operators  $\Box$  and  $[\neq]$ .  $\Box$  is interpreted as an interior operator and  $[\neq]$  corresponds to the inequality relation. We introduce the logic  $S4DT_0$  and show that  $S4DT_0$  is the logic of all  $T_0$  spaces and has the finite model property.