

TREES ON $\mathcal{P}(\omega)/fin$

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ABSTRACT. D. Monk in his book *Cardinal Invariants on Boolean Algebras*, considered trees on a given boolean algebra ordered by end-extension. In this ordering there are maximal elements, so it makes sense to talk about maximal trees on a given boolean algebra. Define the cardinal invariant \mathfrak{tr} as the minimum possible cardinality of a maximal tree on $\mathcal{P}(\omega)/fin$. D. Monk asked whether \mathfrak{tr} is equal to the continuum. We answered this question in the negative way by making use of a parametrized diamond principle. This is joint work with M. Hrušák, G. Campero and F. Miranda.