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*A tree $\pi$-base for $\mathbb{R}^*$ without cofinal branches*

**Abstract:** We prove an analogue to Dordal's result in P.L. Dordal, A model in which the base-matrix tree cannot have cofinal branches, J. Symbolic Logic 52 (1980), 651–664. He obtained a model of ZFC in which there is a tree $\pi$-base for $\mathbb{N}^*$ with no $\omega_2$ branches yet of height $\omega_2$. We establish that this is also possible for $\mathbb{R}^*$ using a natural modification of Mathias forcing.