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Nashville, TN 37205. *Automorphism Spectra of Size $2^n - 1$* . Preliminary report.

The automorphism spectrum of a structure is the set whose elements are the Turing degrees of the nontrivial automorphisms of the structure.

It has been shown that if d_1 and d_2 are incomparable degrees, then there is no computable structure with automorphism spectrum $\{d_1, d_2\}$. It has also been shown that there exist pairwise incomparable degrees d_1, d_2 , and d_3 and a computable structure with automorphism spectrum $\{d_1, d_2, d_3\}$.

We show that for any natural number n there are pairwise incomparable degrees $d_1, d_2, \dots, d_{2^n-1}$ and a computable structure with automorphism spectrum $\{d_1, d_2, \dots, d_{2^n-1}\}$. (Received January 15, 2015)