JÖRG BRENDLE, BENEDIKT LÖWE, Eventually Different Functions and Inaccessible Cardinals.

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Eventually different forcing \mathbb{E} is a c.c.c. forcing whose conditions generate a topology on Baire space called the **eventually different topology**. For a pointclass Γ , we denote by $\Gamma(\mathbb{E})$ the statement "every set in Γ has the Baire property in the eventually different topology". We prove that $\Sigma_2^1(\mathbb{E})$ is equivalent to " ω_1 is inaccessible by reals" and determine the strength of $\Delta_2^1(\mathbb{E})$ in the following diagram of regularity properties (where the letters \mathbb{A} , \mathbb{B} , \mathbb{C} , \mathbb{D} , \mathbb{E} , \mathbb{L} , \mathbb{M} , \mathbb{R} , \mathbb{S} , and \mathbb{V} stand for Amoeba, random, Cohen, Hechler, eventually different, Laver, Miller, Mathias, Sacks, and Silver forcing, respectively, and ev. diff. stands for "for every x, there is an eventually different real over $\mathbf{L}[x]$ "):



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