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Distribution of values of L -functions at the edge of the critical strip.

We prove several results on the distribution of values of L -functions at the edge of the critical strip, by constructing and studying a large class of random Euler products. Among new applications, we study families of symmetric power L -functions of holomorphic cusp forms in the level aspect (assuming the automorphy of these L -functions) at $s = 1$, functions in the Selberg class (in the height aspect), and the family of L -functions of quadratic twists of a fixed $GL(m)/\mathbb{Q}$ -automorphic cusp form at $s = 1$. (Received August 28, 2009)