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Ted Bisztriczky* (tbisztri@math.ualgary.ca). *Classification of bicyclic 4-polytopes*. Preliminary report.

Bicyclic 4-polytopes were introduced by Z. Smilansky in 1990, and they are the convex hulls of a finitely many evenly spaced points on the generalized trigonometric moment curve in real 4-space. In his introduction of these polytopes, Smilansky conjectured that the number of combinatorial types, with n vertices, is at least $\lfloor n/4 \rfloor$, with equality if n is a prime. In this joint work with J. Lawrence, we examine this problem in the context of classifying all cyclically generated 4-polytopes. (Received February 22, 2007)