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Margaret M Bayer* (bayer@math.ku.edu), Department of Mathematics, University of Kansas, 1460 Jayhawk Blvd, 405 Snow Hall, Lawrence, KS 66045-7523, and **T Bisztriczky**. *Some Special Nonsimplicial Polytopes*. Preliminary report.

Cyclic polytopes play a special role in the combinatorial study of simplicial polytopes. Bisztriczky introduced nonsimplicial analogues of cyclic polytopes. The construction depends on parity of the dimension. In odd dimensions there are the ordinary polytopes, which were studied extensively by Bisztriczky, by Dinh and by Bayer. In even dimensions there are the periodically-cyclic Gale polytopes. Here we find analogues of some results on ordinary polytopes for periodically-cyclic Gale polytopes. (Received March 06, 2006)