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Achilleas Sinefakopoulos* (asin@math.cornell.edu), Cornell University, Department of Mathematics, Malott Hall, Ithaca, NY 14853. *On Borel fixed ideals generated in one degree.*

We construct a (shellable) polyhedral cell complex that supports a minimal free resolution of a Borel fixed ideal, which is minimally generated (in the Borel sense) by just one monomial in $S = \mathbb{k}[x_1, x_2, \dots, x_n]$; this includes the case of powers of the homogeneous maximal ideal (x_1, x_2, \dots, x_n) as a special case.

In our most general result we prove that for any Borel fixed ideal I generated in one degree, there exists a polyhedral cell complex that supports a minimal free resolution of I . (Received July 26, 2006)