1064-13-116 **Ezra Miller** (ezra@math.duke.edu), Mathematics Department, Duke University, Box 90320, Durham, NC 27708-032, **Isabella Novik*** (novik@math.washington.edu), University of Washington, Department of Mathematics, Box 354350, Seattle, WA 98195-4350, and **Ed Swartz** (ebs@math.cornell.edu), Cornell University, Department of Mathematics, Ithaca, NY 14853-4201. *Face rings of complexes with singularities.*

We provide a generalization of Schenzel's result characterizing Buchsbaum simplicial complexes to simplicial complexes with singularities. Specifically, our main result asserts that a simplicial complex has singularity dimension at most $m-1$ if and only if the face ring of this complex modulo m generic linear forms has finite local cohomology. Here a face of a complex is called non-singular if its link has the homology of a wedge of spheres of the expected dimension, and it is called singular otherwise. (Received September 02, 2010)