1016-13-298 **Christopher Dodd**, 2814 Rittenhouse St., NW, Washington, DC 20015, **Andrew Marks**, 540 Linda Falls Terrace, Angwin, CA 94508, **Victor Meyerson**, 19520 Cohasset Street, Reseda, CA 91335, and **Ben Richert*** (brichert@calpoly.edu), Mathematics Department, Cal Poly, San Luis Obispo, CA 93407-0403. *Minimal Betti numbers for squarefree monomial ideals.*

It is known that the partial order consisting of sets of graded Betti numbers of squarefree monomial ideals with a given Hilbert function is bounded above, and in fact, that this bound is attained by a squarefree lex ideal. (A squarefree lex ideal is a monomial ideal which is as lex as possible, given the constraint that it be squarefree). It is also known that a unique smallest element to this partial order need not exist. We consider the circumstances under which this might occur. Using the simplicial structure associated to squarefree monomial ideals, we are able to give several infinite families, some growing exponentially with dimension, of examples of partial orders without unique minimal elements. (Received February 14, 2006)