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Laura J Schmidt* (schmidtlaur@uwstout.edu), 237 Harvey Hall, University of Wisconsin-Stout, Menomonie, WI 54751, and **Carl Lee**. *f-Vectors of Regular Triangulations*.

Billera and Lee describe a set of necessary conditions for f -vectors of antistars in simplicial polytopes, and hence for regular triangulations and (by duality) for unbounded, simple polyhedra. It is not yet known whether these conditions are sufficient. In joint work with Carl Lee we construct certain classes of regular triangulations to demonstrate the sufficiency of these conditions in low dimensions. The construction exploits some of the combinatorial structure of the simplicial polytopes used in the proof of the g -Theorem. (Received August 17, 2005)