1014-52-1324   **Tyler Seacrest*** (`tseacrest@hmc.edu`), Harvey Mudd College, 340 E. Foothill Blvd., Claremont, CA 91711, and **Francis Edward Su**. *Minimal Triangulations of Products of Segments and Triangles.*

A simplotope is a polytope that is a product of simplices; such objects arise naturally as strategy spaces for n-person games. Thus a cube, which is a product of line segments, is a special kind of simplotope. A common computational trick when working in a simplotope-shaped space is to divide the space into simplices, which is called triangulation. We present methods for obtaining lower bounds for the minimal number of simplices needed to cover simplotopes that are the products of segments and triangles. In our bounds, we allow triangulations to include interior vertices, and our work improves earlier known bounds for dimensions 4 and higher. (Received September 27, 2005)

1