Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-52-1642 **Tyler Seacrest**, Department of Mathematics, Harvey Mudd College, 1250 N. Dartmouth Ave., Claremont, CA 91711, and **Francis Edward Su*** (su@math.hmc.edu), Department of Mathematics, Harvey Mudd College, 1250 N. Dartmouth Ave., Claremont, CA 91711. *Minimal Triangulations of Simplotopes and Cubes*.

We derive lower bounds for the size of simplicial covers of polytopes that are products of segments and triangles (the so-called simplotopes). These also produce bounds for minimal simplicial covers of simplotopes. These bounds generalize bounds for minimal triangulations of cubes, and are obtained by considering covers of exterior faces and applying combinatorial and geometric considerations. (Received October 05, 2004)