Meeting: 1004, Bowling Green, Kentucky, SS 2A, Special Session on Graph Theory

Michael D Plummer, Vanderbilt University, Nashville, TN 37235, and Xiaoya Zha*, Middle Tennessee State University, Murfreesboro, TN 37132. On the domination of triangulations of graphs having non-negative Euler characteristic. Preliminary report.

In a 1986 paper, Matheson and Tarjan proved that a triangulated disk with n vertices can be dominated by a set of no more than n/3 of its vertices and thus so can any finite graph which triangulates the plane. In this talk, we extend the latter result to the projective plane, the torus and the Klein bottle. (Received January 19, 2005)