Meeting: 1003, Atlanta, Georgia, SS 21A, AMS Special Session on Mathematics and Mathematics Education in Fiber Arts

1003-97-387 **Amy F. Szczepański*** (szczepanski@math.utk.edu), 121 Ayres Hall, 1403 Circle Drive, Knoxville, TN 37996-1300. *Quilts in the Classroom.* Preliminary report.

Features of American patchwork quilts have been used as examples in geometry lessons, typically focusing only on the arrangement of colored patches. This talk will present non-traditional quilts designed to illustrate features of Möbius bands to students unfamiliar with the surface. The use of fabric, the quilting design, and other materials were selected to demonstrate the properties of this surface. These will be explained along with mathematical observations about the construction of the quilts. (Received September 13, 2004)