1035-N1-296   **Samuel R Kaplan*** (`skaplan@unca.edu`), One University Heights, Dept. of Math, CPO#2350, Asheville, NC 28804. *Hyperbolic Pillows.* Preliminary report.

Some hyperbolic tilings can be realized on torii of genus 2 or higher. A sleeve-method is shown for constructing some of the embeddable surfaces out of fabric, forming a "hyperbolic pillow". Using graph theory, one can determine which such pillows can be constructed. The method is flexible enough to allow a wide variety of shapes. Combined with an artistic eye, this construction method opens the door to a wide variety of fabric sculpture.

Some theorems related to the hyperbolic graphs as well as some sample pillows are presented. (Received August 30, 2007)