1014-54-1355   **Sarah-Marie Belcastro*** (`smbelcas@cs.xu.edu`), Xavier University, Cincinnati, OH. *Knitting Topological Surfaces.* Preliminary report.

This talk aims to answer the question: can every topological surface be realized by knitting? (We will explain what we mean by "realized by knitting" both in terms of the restrictions this places on knitting operations and in terms of the topological conditions we must satisfy.) One way to answer this question relies on the classification of topological surfaces. We will also mention connections to algebraic invariants. There will be some new sample knitted surfaces present at the talk. (Received September 28, 2005)