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Daniel Slilaty* (daniel.slilaty@wright.edu) and **Jakayla Robbins**. *Some applications of Tutte's homotopy theorem*. Preliminary report.

Two circuits of a matroid M are said to be “adjacent” when they form a modular pair and the restriction of M to the union of these circuits is connected. A “circuit path” is a sequence of circuits where successive circuits in the sequence are adjacent. Given a linear class L of circuits M , a circuit path is “off of L ” when all of its circuits are not in L . Tutte's Homotopy Theorem says that a closed circuit path off of L is constructed from certain small closed circuit paths. We will discuss some applications of Tutte's Theorem. (Received December 03, 2012)