1049-05-93 **Andrew Berget*** (berget@math.umn.edu), School of Mathematics University of Minnesota, 127 Vincent Hall, 206 Church Street Southeast, Minneapolis, MN 55414. *Tensors, Products, and Tutte Polynomials.*

I will start by explaining how the number of no broken circuit bases of a matroid make an unexpected appearance in the smallest symmetric group representation containing a fixed decomposable tensor. Sketching the proof of this result suggests the consideration of the vector space spanned by certain products of linear forms. This vector space interprets the full two-variable Tutte polynomial of a matroid. After indicating the proof of this result, I will pose some open problems. (Received February 24, 2009)