1046-05-1262 Ken Shoda* (kenshoda@gwu.edu), 1628 Massachusetts Ave SE, Washington, DC 20003. Super-exponential families of nonisomorphic matroids having the same Tutte polynomial.

Omer Giménez showed how to construct, for each permutation of [n], a matroid on 4n + 5 elements so that all n! resulting matroids are nonisomorphic but have isomorphic lattices of cyclic flats of width 2. We show that these matroids in fact have the same Tutte polynomial. Thus, this gives a super-exponential family of nonisomorphic matroids having isomorphic lattices of cyclic flats and the same Tutte polynomial. (Received September 15, 2008)