Josh Wiscons* (wiscons@colorado.edu), Department of Mathematics, University of Colorado, UCB 395, Boulder, CO 80309. Groups of finite Morley rank with a split BN-pair of rank 1.

We present a result that identifies certain 2-transitive permutation groups of finite Morley rank as $PSL_2(K)$ for K an algebraically closed field. We cast the result in the language of BN-pairs and show how it fits into addressing the Cherlin-Zil'ber conjecture: every infinite simple group of finite Morley rank is an algebraic group over an algebraically closed field. (Received September 15, 2010)