1145-11-2696   **Sara Chari*** (`sara.chari.gr@dartmouth.edu`), Department of Mathematics, 102 Kemeny Hall, 27 North Main St., Hanover, NH 03755. *Metacommutation of Primes in Central Simple Algebras.*

In a quaternion order of class number one, an element can be factored in multiple ways depending on the order of the factorization of its reduced norm. The fact that multiplication is not commutative causes an element to induce a permutation on the set of primes of a given reduced norm. We discuss this permutation and previously known results about the cycle structure, sign, and number of fixed points for quaternion orders. We generalize these results to other orders in central simple algebras over global fields. (Received September 25, 2018)