

1106-20-1570 **Andrew Sale*** (andrew.sale@some.oxon.org). *A geometric approach to the conjugacy search problem: the conjugacy length function.*

Given a pair of conjugate elements u, v in a group, the conjugacy length function determines an upper bound on the size of shortest group element g such that gu is equal to vg . Such a function can be used when determining the complexity of the conjugacy search function. I will describe some recent results concerning the nature of the conjugacy length function in some families of groups. (Received September 14, 2014)