

1136-20-92

Hung P Tong-Viet* (tongviet@math.binghamton.edu), Department of Mathematical Sciences, Binghamton University (SUNY), Binghamton, NY 13902-6000. *2-parts of real class sizes*. Preliminary report.

An element x in a finite group G is said to be real if x and its inverse are G -conjugate. A conjugacy class is real if it contains a real element. Many important results in group theory admit real versions. In this talk, I will discuss some recent results concerning real class sizes. In particular, I will outline the proof that a finite group has 2-length one if all its non-central real class sizes have the same 2-part. As a consequence, it follows that a finite group is solvable if it has two real class sizes. This confirms a conjecture due to G. Navarro. (Received January 04, 2018)