

1084-20-42

Stephen D Smith* (smiths@math.uic.edu). *Some remarks on Oliver's p -group conjecture.* Preliminary report.

After proving the Martino-Priddy Conjecture on p -fusion systems, Oliver observed that for odd p , an easier proof would follow from showing that the Thompson subgroup $J(P)$ (for a Sylow p -group P) should lie in another normal subgroup he denoted by $X(P)$.

The literature now contains various partial results—especially addressing the stronger conjecture that a faithful failure-of-factorization module V for P should admit an element of $Z(P)$ acting quadratically.

The talk will survey some of the results in the literature; and add a few elementary remarks, using the viewpoint of embedding P in a full unipotent group on V . (Received August 12, 2012)