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George Glauberman and **Justin Lynd*** (justin.lynd@mso.umt.edu), Department of Mathematical Sciences, University of Montana, 32 Campus Drive, Missoula, MT 59812. *Centric linking systems and control of fixed points by p -local subgroups.*

Andrew Chermak has recently shown that each saturated fusion system has a unique associated centric linking system. I will give an high-level overview of Oliver's version of Chermak's proof, which depends on an ingenious filtration, using the Thompson subgroup and due to Chermak, of the collection of centric subgroups. Both Chermak's and Oliver's proofs use the classification of finite simple groups in an indirect way. I will explain how new applications of a theorem of Glauberman from the early 1970s on control of fixed points by p -local subgroups allow a classification-free proof of Chermak's Theorem. Glauberman's theorem is usually applied with p odd and in the presence of quadratic action, but, perhaps surprisingly, it can be also applied effectively when $p = 2$ in the presence of offenders. Questions arising out of this work, including further directions, will be discussed. (Received August 31, 2015)