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Matthew JK Gelvin* (mgelvin@gmail.com), 278 Court Street, #207, Middletown, MA 06459,
and **Sune P Reeh** (spr@math.ku.dk). *Minimal characteristic bisets of saturated fusion systems.*

Let S be a finite p -group and \mathcal{F} a saturated fusion system on S . A characteristic biset Ω for \mathcal{F} is an (S, S) -biset that abstracts the left and right multiplication of S on an ambient group that induces \mathcal{F} . It is known that the biset determines the fusion system, but not conversely. Recent work has shown that there is always a unique *minimal* characteristic biset $\Omega_{\mathcal{F}}$.

In this talk we will discuss several structure theorems for $\Omega_{\mathcal{F}}$, leading to the result that a centric linking system \mathcal{L} associated to \mathcal{F} is the p -centric part of $\Omega_{\mathcal{F}}$. $\Omega_{\mathcal{F}}$ contains less and more data than \mathcal{L} : Less in that we do not have a partial multiplication; more in that even the non- \mathcal{F} -centric subgroups of S are seen. We will also discuss normalizers of subgroups $P \leq S$ in $\Omega_{\mathcal{F}}$ and the open conjecture that the normalizer biset is in fact the minimal characteristic biset for the normalizer subsystem: $N_{\Omega_{\mathcal{F}}}(P) = \Omega_{N_{\mathcal{F}}(P)}$. These results show a close connection between minimal characteristic bisets and p -local finite groups. (Received August 21, 2013)