

1125-20-564

Ian Hogan* (ihogan@kent.edu), 631 Silver Meadows Blvd, Kent, OH 44240, and **Michael Decker**. *The Brauer Complex and Decomposition Numbers of Symplectic Groups*. Preliminary report.

We follow the development of L. Chastkofsky and J. E. Humphreys to construct the Brauer Complex of $Sp_4(q)$ and $Sp_6(q)$. The complex is an open simplicial complex derived from the alcove geometry of the associated affine Weyl group together with Deligne-Lusztig character labels. The Deligne-Lusztig characters of $Sp_4(q)$, odd q , were computed by B. Srinivasan and of $Sp_6(q)$ even q by F. Lübeck. As a consequence we gain information about the decomposition matrices for these groups in defining characteristic. (Received September 06, 2016)