1067-37-198   **Hanfeng Li*** (`hfli@math.buffalo.edu`), Department of Mathematics, SUNY at Buffalo, Buffalo, NY 14260-2900. *Entropy and Fuglede-Kadison determinant.*

For any discrete group G and any element f in the integral group ring ZG of G, one may consider the algebraic action of G associated to f, i.e., the shift action of G on the Pontryagin dual of ZG/ZGf. I will discuss the relation between the entropy of this algebraic action and the Fugelde-Kadison determinant of f in the group von Neumann algebra of G. (Received August 01, 2010)