

Meeting: 999, Nashville, Tennessee, SS 1A, Special Session on Von Neumann Algebras and Noncommutative Ergodic Theory

999-46-89 **Allan M Sinclair** and **Roger R Smith*** (rsmith@math.tamu.edu), Dept. of Mathematics, Texas A&M University, College Station, TX 77843. *The Pukanszky invariant and group von Neumann algebras.*

We consider group von Neumann algebras $VN(G)$ with maximal abelian subalgebras arising from abelian subgroups $H \subseteq G$. The main result gives a characterization of the Pukanszky invariant of $VN(H)$ in terms of the algebraic structure of $H \subseteq G$, allowing us to generate many new values for the invariant. (Received August 12, 2004)