Title: On groups of central type and cohomology of groups.

Abstract: Let G ba a finite abelian group of order n. The twisted group algebra $\mathbb{C}^c[G]$ is isomorphic to the matrix algebra $M_n(\mathbb{C})$ if and only if $G \simeq A \times A$ and c corresponds to some multiplicative nondegenerate alternating form $\alpha_c : G \times G \to \mathbb{C}^*$. We refer c as a nondegenerate 2-cocycle. A finite group G (possibly nonabelian) is called a group of central type if it admits a nondegenerate 2-cocycle, namely $\mathbb{C}^c[G] \simeq M_n(\mathbb{C})$. A family of central type groups were contructed by Etingof and Gelaki. We give a comprehensive cohomological interpretation to their construction and extend it strictly.

Joint work with Y.Ginosar