

1145-20-1005

Nham Vo Ngo* (nvngo@ung.edu), Department of Mathematics, University of North Georgia - Gainesville, Oakwood, GA 30566. *Zariski Topology of Group Cohomology Rings.*

In this talk, we give a brief survey of the group cohomology theory and its interaction with Zariski topology of commutative rings. In particular, let G be a group defined over a field of prime characteristic p . The direct sum of all the even degree cohomology spaces $\bigoplus_{n \geq 0} H^{2n}(G, k)$ has a commutative ring structure under the cup product. We investigate the Zariski topology of the maximal spectrum of this ring for various types of the group G . (Received September 18, 2018)