

1019-13-37

Kazuma Shimomoto* (shimomot@math.utah.edu), 127 Vincent Hall, 206 Church St. S.E.,
Minneapolis, MN 55455. *Galois cohomology and ring theory.*

Faltings uses almost mathematics to deduce the almost vanishing of Galois cohomology. In this talk, we derive some ring theoretic properties from the vanishing of Galois cohomology. In particular, the annihilator of the cohomology can be calculated by the trace map. We also address some questions and known results about the structure of the ring of integers of a local field in characteristic zero as a Galois module. (Received July 27, 2006)