

# GALOIS REPRESENTATIONS AND AUTOMORPHIC FORMS SEMINAR

Submitted by Anonymous on Wed, 09/29/2010 - 11:01

Splitting of Iwasawa Modules and Leopoldt Conjecture

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**Date:** Wed, 10/20/2010 - 14:15 - 15:15

**Location:** S-101

Let  $p$  be an odd prime number and let  $F$  be a totally real field. Let  $F_{\text{cyc}}$  be the cyclotomic extension of  $F$  generated by the roots of unity of order a power of  $p$ . From the maximal abelian extension of  $F_{\text{cyc}}$  which is unramified (resp. unramified outside auxiliary primes), we get exact sequences of Iwasawa modules. We will discuss how splitting of these exact sequences are linked to Leopoldt conjecture for  $F$  and  $p$ . (JW with C. Khare)

**event\_id:** 40218

**Calendar:** 369

**Video:** <http://video.ias.edu/galois/wintenberger>

terms:

- [Galois Representations and Automorphic Forms](#)