1147-11-38 **Stefan Gille*** (gille@ualberta.ca), Department of Math.& Stat. Sciences, University of Alberta, 699 Central Academic Building, Edmonton, Alberta T6G 2G1. *Purity for hermitian Witt groups of Azumaya algebras over regular semilocal rings.*

Let R be a regular semilocal Dedekind domain containing $1/2$ with fraction field K, and (A, τ) an R-Azumaya algebra with involution of the first or second kind. By second kind we mean that R is a quadratic Galois extension of the fix ring of the involution τ. For $\epsilon \in \{\pm 1\}$ there is a exact complex of ϵ-hermitian Witt groups

$$0 \longrightarrow W_\epsilon(A,\tau) \longrightarrow W_\epsilon(A_K,\tau_K) \longrightarrow \bigoplus_{htP=1,\tau(P)=P} W_\epsilon(A_{k(P)},\tau_{k(P)}) \longrightarrow 0$$

where $k(P)$ is the residue field at the prime P of R, and where we have set $(A_{k(P)},\tau_{k(P)}) := k(P) \otimes_R (A,\tau)$ and $(A_K,\tau_K) := K \otimes_R (A,\tau)$.

This complex is split exact if R is a DVR and τ of the first kind. As a corollary it implies purity for the hermitian Gersten-Witt complex of an Azumaya algebra with involution over a regular semilocal ring R of dimension two. (Received November 04, 2018)