

Title: The Knebusch trace formula for hermitian forms

Abstract: Let K/F be an extension of ordered fields and q a quadratic form over K . The Knebusch trace formula describes the signature of the Scharlau transfer of q at an ordering P of F in terms of the signatures of q at the orderings of K that extend P . I will discuss an extension of this formula to hermitian forms over central simple algebras with involution and how it can be used to define signatures of hermitian forms that are free of sign ambiguities. This is joint work with Vincent Astier.