

**UBC Seminar of algebraic groups, Galois
cohomology and related topics
Friday, March 20, 10-10:50am, Math Annex 1118.**

Speaker: Jean Fasel (UBC)

Title: Unimodular rows over smooth algebras

Abstract: Let R be a smooth k -algebra of dimension d . A well known theorem by H. Bass and S. Schanuel states that stably free projective R -modules of rank strictly bigger than d are free. In general, there are some stably free non free projective modules of rank d and it is a classical (and hard) problem to understand when such a module is free or not. In this talk, I will present the recent developments in the subject and give a complete answer to the problem in the case of real smooth rational algebras.