1014-17-1607 **Eduardo Tengan***, 400 Dowman Drive, Atlanta, GA 30322. *The Brauer group of a 2-dimensional regular local ring.* Preliminary report.

Let A be a 2-dimensional noetherian regular local ring with residue field k, and let n be a positive integer relatively prime to the characteristic of k. Let $F = \operatorname{Frac} A$ denote the field of fractions of A. We present a proof of the exactness of the following Bloch-Ogus sequence of étale cohomology groups

$$0 \to H^2(A, \mu_n^{\otimes 2}) \to H^2(F, \mu_n^{\otimes 2}) \to \bigoplus_{\mathfrak{p}} H^1(k(\mathfrak{p}), \mu_n) \to H^0(k, \mathbb{Z}/n) \to 0$$

Here $\mathfrak{p}$ runs over the set of height 1 prime ideals of A, and $k(\mathfrak{p}) = \operatorname{Frac}(A/\mathfrak{p})$. This result is based on the corresponding exact sequence in K-theory, whose proof is presented in an earlier talk, *A Gersten sequence for 2-dimensional regular local rings.* (Received September 28, 2005)