

# LIST OF ERRATA OF THE BOOK “REAL ALGEBRAIC GEOMETRY”

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Ergeb. Math. Grenzgeb. (3) 36, Springer-Verlag 1998

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- p. 130, l. 28-29** (precision concerning an example of a nonnegative  $\mathcal{C}^\infty$  function on  $\mathbb{R}$  whose square root is not  $\mathcal{C}^\infty$ , communicated by J-C. Tougeron)

An example of a  $\mathcal{C}^\infty$  function from  $\mathbb{R}$  to  $\mathbb{R}$ , which is positive outside 0 and infinitely flat at 0, and whose square root is not  $\mathcal{C}^2$  at 0, is given in:

G. Glaeser: Racine carrée d’une fonction différentiable. Ann. Inst. Fourier 13 (1963), 203–210.

- p. 189, l. 18-19**

Corollary 8.7.13 cannot be used at this place since it is not yet known that  $B$  is noetherian. One can use [264] Chap. 8, Theorem 3, which says that, for every prime ideal  $\mathfrak{p}$  of  $B$ ,  ${}^hB \otimes_B k(\mathfrak{p})$  is an integral  $k(\mathfrak{p})$ -algebra whose local rings are separable algebraic extensions of  $k(\mathfrak{p})$ . In particular, if  $\mathfrak{q} \subset \mathfrak{q}'$  are prime ideals of  ${}^hB$  such that  $\mathfrak{q} \cap B = \mathfrak{q}' \cap B$ , then  $\mathfrak{q} = \mathfrak{q}'$ .

- p. 191, l. 5-3 from bottom** (communicated by A. Tancredi)

The argument for the fact that  $\mathfrak{m}_x$  is finitely generated is incorrect and should be replaced by the following one:

Let  $\mathfrak{n}_x$  be the ideal of  $f \in \mathcal{P}(V)$  vanishing at  $x$ . We have  $\mathfrak{n}_x \mathcal{N}(M) = \mathfrak{m}_x$ , hence  $\mathfrak{m}_x$  is finitely generated.

- p. 203, l. 11**

Read “where  $\pi$  is the projection ...” instead of “where  $\Pi$  is the projection ...”

**p. 300, l. 15** (statement of Proposition 12.1.3)

Read “Let  $\xi$  be a prealgebraic vector bundle” instead of “Let  $\xi$  be an algebraic vector bundle”.