Erratum: Antonio G. Rodicio, *Flat exterior Tor algebras and cotangent complexes*, Comment. Math. Helv. 70 (1995) 546–557.

The proof of Proposition 5, and so the one of Theorem 1 and Corollary 3, are incomplete. The problem is that it has been used as a general result in homotopical algebra that (as far as we know) is not yet proved: the fact that the Künneth spectral sequence of simplicial algebras over a simplicial ring is a spectral sequence of bigraded algebras with divided powers. Recently we have learned that our claim in Remark 6 on the existence of the bisimplicial algebra resolution P was too precipitate. Our idea to construct P only works when Y contains a field; and in this case the resolution can also be easily deduced from the bar construction. Therefore, although we are positively convinced that the results are valid in full generality, the proofs given in the paper are, at the present, only complete when the rings in consideration contain a field.

In fact, we have an alternative proof of the cohomological part of Corollary 3, for general rings, and as a consequence, in the case A is noetherian, one of the homological part. This proof will appear in our paper “On the acyclicity of the Tate complex”.

Even though it is probable that the bisimplicial algebra resolution does not exist in general, it is easy to prove that the spectral sequence is of bigraded algebras. For, it is used as a bisimplicial module resolution and it is defined, using the shuffle operator, an external product in the total complex associated to the bicomplex, which is compatible with the filtrations. So it seems likely that the divided powers exist. We leave it as an interesting open problem.

On the other hand, Corollary 3 was used in the paper “Projective exterior Koszul homology and decomposition of the Tor functor” (Invent. Math. 123, 123–140 (1996)) by A. Blanco, J. Majadas and A. G. Rodicio. Since at the present it is not proved for general rings that the FLEKH property implies the vanishing of André-Quillen homology, in Proposition 7 and Theorem 8 (i), the hypothesis “ I is a FLEKH-ideal” must be replaced by “ $H_j(A, B, -) = 0$ for all $j \geq 3$ ”. No additional change is necessary in the statements of the results: though in the proofs of Theorem 2 and Theorem 13, our incomplete Proposition 5 was used, alternative proofs of these results will also appear in the paper cited above.

Universidade de Santiago de Compostela
Departamento de Álgebra
Facultade de Matemáticas
Campus Universitario
E-15706 Santiago de Compostela