ERRATUM TO: "DISCONTINUOUS GROUPS IN POSITIVE CHARACTERISTIC AND AUTOMORPHISMS OF MUMFORD CURVES" (MATH. ANN. 320 (2001), NO. 1, 55–85)

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The main theorem of [2], claiming to give an upper bound for the number of automorphisms of a Mumford curve in characteristic $p > 0$, is false. The correct upper bound, due to van der Put and Voskuil, is the main theorem of [5]. The errors in [2] are explained in Remarks 4.8 and 8.27 of [5]. This also implies that the subsequent study, in [3] and [4], of curves attaining the (false) upper bound from [2] does not determine all Mumford curves with maximal automorphism group w.r.t. their genus; see [5] for corrections.

The further main results from the introduction of [2] remain valid in the following sense:

(1) Proposition 3 from [2] describes the family of "Artin-Schreier-Mumford curves" that indeed attains the upper bound from the main theorem of [2]; but this bound is not the maximal one.

(2) Proposition 4 of [2] describing the automorphism group of Drinfeld modular curves for principal congruence groups in characteristic > 3 remains correct, even with the new classification from [5] (observing, as described in the note added in proof to [2], that the curves are not equivariantly deformation rigid, see [1]).

References

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