Bas Edixhoven points out that the precision estimates for the algorithm as described do not properly account for the fact that the matrix of Frobenius in the given basis of $H^1(A, K)_-$ does not have integral entries. One way to remedy this is to simply carry more precision: the denominators in the matrix $M$ have valuation $O(\log(g))$, so carrying $O(n \log(g))$ extra precision suffices to correctly compute the characteristic polynomial of $M'$ to the desired precision.

However, when one does this (as observed numerically by Frederik Vercauteren), one finds that the denominators actually remain bounded. The reason is because there is a basis on which $M$ does have integral entries, given by generators of the crystalline $H^1$ of the complete curve; it is more convenient in practice to compute using such a basis. Concretely, if $t$ is a uniformizer at infinity in the minus eigenspace of the hyperelliptic involution (e.g., $x^g/y$), then the submodule of the $\mathbb{Z}_q$-span of the $x^i dx/y$ for $i = 1, \ldots, 2g - 1$ whose $t$-adic expansions can be integrated over $\mathbb{Z}_q$ is stable under Frobenius, so any basis of this submodule gives an integral matrix.

Other errata (also found by Edixhoven):

- page 326, line -4: the left side should be $d(x dy_1 \wedge \cdots \wedge dy_i)$.
- page 328, line 10: the closure of the affine curve is not smooth; $C$ should be taken to be the normalization of that closure.
- page 329, line 10: $2g - 1$ should be $2g - 2$.
- page 330, line 17: “generated by $y$” should be “generated by $p$ and $y$”.
- page 331, line 8: $2m + 1$ should be $d(m + 1) - 2$. 

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• page 331, line 14: the $2g$ on the left should be the number of Weierstrass points which are rational over $\mathbb{F}_{q^i}$. The same is true of the $2g$ on the right in line 20 (so they still cancel each other).

• page 332, line 2: the equation $a_i = a_{2g-i}$ should read $q^{g-i}a_i = a_{2g-i}$.

• page 334, line 2 and 4: $N$ should be $N_1$.