ERRATUM TO *PRISMATIC DIEUDONNÉ THEORY*

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There is a mistake in the proof of Proposition 5.23 of the published version. The content of this proposition was already known to be true by a different proof, cf. the references given before the statement of Proposition 5.23. Also, the arguments of this fallacious proof are not used anywhere else in the paper, so this mistake does not affect any of the results stated in the paper.

The mistake was pointed out to us by Akhil Mathew and Andrew Senger, whom we would like to thank very much. The counterexample below was presented to us by Andrew Senger.

The key step in the proof of Proposition 5.23. is to show that for a quasiregular semiperfect ring R, the the divided Frobenius φ_1 acts topologically nilpotently on the kernel of the map map $A_{\mathrm{crys}}(R) \to W(R)$. This is not true. Indeed, consider $R = \mathbb{F}_p[x^{1/p^\infty}]/x$ and the element

$$\sum_{k \in \mathbb{Z}} p^k [x^{1/p^k}]$$

of $A_{\mathrm{crys}}(R)$.

This element is fixed by the divided Frobenius and lies in the kernel of the map $A_{\mathrm{crys}}(R) \to W(R)$.

The issue with the proof is the following: while the generators of the kernel of $A_{\mathrm{crys}}(R) \to W(R)$ used in the proof do topologically generate the kernel in the p-adic topology of $A_{\mathrm{crys}}(R)$, they fail to do so in the p-adic topology of the kernel itself.