



Correction to: Modularity lifting beyond the Taylor–Wiles method

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Throughout the text, all occurrences of double brackets \llbracket and \rrbracket were inadvertently replaced by single brackets. This occurred 47 times, resulting in 47 errors to the final manuscript. The error was introduced by a typesetting operator. To highlight some specific points where confusion could arise:

- (1) The ring S_∞ of §2 (and thereafter) should be isomorphic to the completed group ring $\mathcal{O}\llbracket(\mathbf{Z}_p)^q\rrbracket$ rather than the polynomial ring $\mathcal{O}[(\mathbf{Z}_p)^q]$. This also occurs in the proof of Proposition 2.3, the introduction to §6, in Theorem 6.3, and also in Theorem 9.13. (5 occurrences)
- (2) The ring R_∞ of Proposition 2.3 should be defined as the power series ring $\mathcal{O}\llbracket x_1, \dots, x_{q-1} \rrbracket$ (or possibly a different number of variables when it occurs later in the text) rather than the polynomial ring $\mathcal{O}[x_1, \dots, x_{q-1}]$ (5 occurrences)

The online version of the original article can be found under <https://doi.org/10.1007/s00222-017-0749-x>.

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- (3) The q -expansion map appearing in the proof of Theorem 3.11 should be valued in the module $K/\mathcal{O}[[q]]$ rather than $K/\mathcal{O}[q]$. (2 occurrences)
- (4) The explicit presentation of a local deformation ring over \mathcal{O}/ϖ^m in the proof of Lemma 3.22 should be a quotient of a power series ring. (1 occurrence)
- (5) The completed local rings of the modular curves considered in the proof of Lemma 3.28 should be $\mathcal{O}[[q]]$ (or $\mathcal{O}[[q^e]]$) rather than the rings $\mathcal{O}[q]$ or $\mathcal{O}[q^e]$. (9 occurrences)
- (6) The power series ring A in the statement of Lemma 4.2 has the form $B[[T_1, \dots, T_n]]$ and not $B[T_1, \dots, T_n]$. Similarly, all other rings occurring in the proof of this Lemma should be power series rings and not polynomial rings. (5 occurrences)
- (7) Various presentations of rings related to \tilde{R}^\dagger in the proof of Theorem 4.3 should be power series rings over k rather than polynomial rings. (5 occurrences)
- (8) The generating function $H_R(t)$ in the proof of Theorem 4.3 should be defined as an element of $\mathbf{Z}[[t]]$ and not of the ring $\mathbf{Z}[t]$. (2 occurrences)
- (9) The framed deformation rings occurring before Lemma 4.11 should be quotients of power series rings over local deformation rings, as should some of the explicit rings occurring in the proof of Lemma 4.11. (6 = 3 + 3 occurrences)
- (10) The ring \mathcal{O}^\square in Theorem 6.3 should be a power series ring, not a polynomial ring. (1 occurrence)
- (11) The ring $A[X]$ occurring in the statement of Cor 9.13 should be $A[[X]]$. However, the ring $A[T]/(T^q - 1)$ is indeed a quotient of a polynomial ring rather than a power series ring. This may be the only point in the paper where it would *not* be correct to replace any occurrence of a polynomial ring with a power series ring. (1 occurrence)
- (12) The rings \mathcal{O}^\square , R_∞^1 and R_∞^2 in Theorem 9.19 should be power series rings. (5 occurrences)

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