Erratum to "Modularity of a nonrigid Calabi–Yau manifold with bad reduction at 13"

(Ann. Polon. Math. 90 (2007), 89-98)

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M. Schütt has informed us that the argument used in the proof of the modularity of the double octic studied in our paper (Theorem 3.1) is not sufficient. The Faltings–Serre–Livné method requires that the traces of the Frobenius morphism are even, which does not hold in our case. Instead we can use an argument of Serre from a letter to Bloch worked out by M. Schütt in [1]. We cannot apply [1, Prop. 1] directly as we did not compute the trace of Frob₁₃. However, a close inspection of the proof shows that we can replace the prime 13 with 61. Consequently, in order to show that the *L*-series of the Galois representations considered are equal it is enough to check equality of the traces of the Frobenius at $p \in \{3, 5, 7, 11, 17, 19, 31, 37, 61\}$.

We would like to thank M. Schütt for pointing out the mistake in our proof and suggesting a correction.

References

 M. Schütt, On the modularity of three Calabi-Yau threefolds with bad reduction at 11, Canad. Math. Bull. 49 (2006), 296-312.

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Received 9.7.2007

(1698a)

²⁰⁰⁰ Mathematics Subject Classification: 14G10, 14J32.