



# COMPOSITIO MATHEMATICA

## Corrigendum

### On the probabilities of local behaviors in abelian field extensions

(Compositio Math. 146 (2010), 102–128)

Melanie Matchett Wood

Compositio Math. **156** (2020), 1078.

[doi:10.1112/S0010437X2000723X](https://doi.org/10.1112/S0010437X2000723X)



FOUNDATION  
COMPOSITIO  
MATHEMATICA



LONDON  
MATHEMATICAL  
SOCIETY  
EST. 1865



## Corrigendum

### On the probabilities of local behaviors in abelian field extensions

(Compositio Math. 146 (2010), 102–128)

Melanie Matchett Wood

The right-hand side of Theorem 3.1 of [Woo10] should contain an additional factor of  $(\text{Res}_{s=1} \zeta_K(s))^{w_{K,C}}$ . The equality  $\lim_{s \rightarrow 1} \zeta_K(s) = 1$  was mistakenly used, which holds for  $K = \mathbb{Q}$  but does not hold in general (the residue is given by the analytic class number formula).

Thank you to Rachel Newton, Christopher Frei, and Daniel Loughran for pointing this out.

#### REFERENCES

- Woo10 M. M. Wood, *On the probabilities of local behaviors in abelian field extensions*, *Compos. Math.* **146** (2010), 102–128, doi:[10.1112/S0010437X0900431X](https://doi.org/10.1112/S0010437X0900431X).

Melanie Matchett Wood [mmwood@berkeley.edu](mailto:mmwood@berkeley.edu)  
Department of Mathematics, University of California, Berkeley, 970 Evans Hall #3840,  
Berkeley, CA 94720-3840, USA

---

Received 26 November 2019.

*2010 Mathematics Subject Classification* 11R20, 11R45.

*Keywords:* abelian extensions, density of discriminants, local-to-global, local behavior.

This journal is © [Foundation Compositio Mathematica](https://www.foundation-compositio-mathematica.org/) 2020.