



## Correction to: The spectral decomposition of $|\theta|^2$

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### Correction to: **Mathematische Zeitschrift** <https://doi.org/10.1007/s00209-020-02665-8>

In the original publication, the publisher added irrelevant content to the Abstract section by mistake. The correct Abstract section is given here.

#### Abstract

Let  $\theta$  be an elementary theta function, such as the classical Jacobi theta function. We establish a spectral decomposition and surprisingly strong asymptotic formulas for  $\langle |\theta|^2, \varphi \rangle$  as  $\varphi$  traverses a sequence of Hecke-translates of a nice enough fixed function. The subtlety is that typically  $|\theta|^2 \notin L^2$ . Applications to the subconvexity, quantum variance and 4-norm problems are indicated.

The original article has been corrected.

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