

## TEST8

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We discuss and compare two approaches for estimating a short second moment of  $L$ -functions on  $\mathrm{PGL}_2$  in the spectral aspect: that of Iwaniec [1], using the approximate functional equation and Kuznetsov formula, and that of [2] using period integrals.

### REFERENCES

- [1] Henryk Iwaniec. The spectral growth of automorphic l-functions. *Journal für die reine und angewandte Mathematik*, 428:139–160, 1992.
- [2] Paul D. Nelson. Bounds for standard  $L$ -functions. *arXiv e-prints*, page arXiv:2109.15230, September 2021.