

Effective weak universality in short intervals

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Abstract. We prove an effective multidimensional Ω -result of Voronin in short intervals $[T, T + H]$ with $T^{\frac{27}{82}} \leq H \leq T$, and derive an effective weak universality theorem of the Riemann zeta-function. Furthermore, we provide a few remarks for these results under the assumption of the Riemann hypothesis.

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