

CORRECTIONS TO THE FREQUENCY OF DIGITS IN THE LÜROTH EXPANSION

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There is a mistake in the upper bound of Theorem 3.1. In the proof of the upper bound, when computing $d_{\mu_\alpha}(x)$ the last equality is wrong. The correct statement, proved by Aihua Fan, Lingmin Liao, Jihua Ma and Baowei Wang in [F], is the following:

Theorem 0.1. *If $\alpha = (\alpha_1\alpha_2\cdots)$ is a stochastic vector then*

$$\dim_H F(\alpha) = \max \left\{ \frac{1}{2}, \frac{-\sum_{n=1}^{\infty} \alpha_n \log \alpha_n}{\sum_{n=1}^{\infty} \alpha_n \log(n(n+1))} \right\}$$

Remark 0.1. *Note that in this result the authors made no assumption on the finiteness of Lyapunov exponent*

$$\lambda(\mu_\alpha) = \sum_{n=1}^{\infty} \alpha_n \log(n(n+1))$$

Thanks to Thomas Jordan for pointing out this error.

REFERENCES

- [F] Aihua Fan, Lingmin Liao, Jihua Ma and Baowei Wang *Dimension of Besicovitch-Eggleston sets in countable symbolic space* *Nonlinearity* **23** (2010) 1185–1197. (document)

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