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Alexander I. Bufetov & Boris Solomyak

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CORRIGENDUM TO "HÖLDER REGULARITY FOR THE SPECTRUM OF TRANSLATION FLOWS"

BY ALEXANDER I. BUFETOV & BORIS SOLOMYAK

ABSTRACT. — The paper corrects the formulation of [3, Prop. 5.4], whose proof is unchanged.

RÉSUMÉ (Correction à "Régularité Hölder pour le spectre des flots de translation")
Cet article corrige la formulation de [3, Prop. 5.4], dont la preuve est inchangée.

In [3, Prop. 5.4] a different order of quantifiers was needed from the one stated. The following proposition was, in fact, proven in the paper, and this is the correct formulation:

PROPOSITION. — *For any $\varepsilon_1 > 0$ there exist $\delta_0 > 0$ and $\varrho > 0$ such that for $\mathbb{P}$-a.e. $\boldsymbol{a} \in \Omega_{\boldsymbol{q}}$ and any $\delta \in (0, \delta_0)$, for all $B > 1$, and every Oseledets subspace $H^J_{\boldsymbol{a}}$ corresponding to $\boldsymbol{a}$, containing the unstable subspace $E^u_{\boldsymbol{a}}$,*

$$\dim_H(\mathfrak{E}(\varrho, \delta, B) \cap H^J_{\boldsymbol{a}}) \leqslant \dim(H^J_{\boldsymbol{a}}) - \kappa + \varepsilon_1,$$

where $\kappa = \dim(E^u_{\boldsymbol{a}})$.

The short derivation of [3, Th. 4.1] from [3, Prop. 5.4] in this form and the proof of the proposition do not require any changes.

Incidentally, exactly the same mixed-up parameter dependence is present in [2, Prop. 9.1], and the correction is also the same. We would like to note that the proposition with the order of quantifiers as it was published, is, in fact, correct when the Rauzy induction is periodic; essentially, in the case of a single substitution, as it was shown in [1].

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KEYWORDS. — Translation flows, spectral measures, matrix Riesz products, upper Lyapunov exponents, Erdős-Kahane argument, Bratteli-Vershik automorphisms, renormalization cocycle.

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Alexander I. Bufetov, Aix-Marseille Université, CNRS, Centrale Marseille, I2M, UMR 7373,
39 rue F. Joliot Curie, Marseille, France
Steklov Mathematical Institute of RAS, Moscow, Russia
Institute for Information Transmission Problems, Moscow, Russia
E-mail : bufetov@mi.ras.ru

Boris Solomyak, Department of Mathematics, Bar-Ilan University
Ramat-Gan, Israel
E-mail : bsolom3@gmail.com
Url : https://u.math.biu.ac.il/~solomyb/personal.html