ERRATUM DYNAMICAL ZETA FUNCTIONS AND DYNAMICAL DETERMINANTS FOR HYPERBOLIC MAPS

-p. 11: in line 16, it is the poles of the Fourier transform of the correlation function.

-p. 36: in the second line of (2.28) the factor $p/(p-1)$ should be removed.

-p. 41: The last sentence in the proof of Lemma 2.27 is not needed as the penultimate sentence in fact proves both inequalities.

-p. 55: lines 6-7, remove "(as many times ... and $w \mapsto V(\xi, \eta, w)$)"

-p. 69: in the proof of Prop 2.39, when invoking Prop 2.28, we use a slight generalisation of (2.46), in the spirit of Rk 5.2 of [25].

-P. 90: In lines 3 and 6, the function θ_ω should be replaced by $\theta_\omega \circ \kappa_{\omega'}^{-1}$ and $\theta_\omega \circ \kappa_\omega^{-1}$, respectively, in lines 2 and 3, the function $\theta_{\omega'}$ should be replaced by $\theta_{\omega'} \circ \kappa_{\omega'}^{-1}$.

-P. 93: In (3.25) the factor $C(m)$ should be inside the product over k. What is bounded in (3.25) is not the trace norm, but just the absolute value of the trace.

-P. 94: Claim (3.26) is for the absolute value of the flat trace.

-In the first line of p. 103, both occurrences of t should be removed.

-On p. 103, four lines above (3.51), one should also invoke (2.40) to get compactness of $(\mathcal{L}^m)_c$.

-On p. 104, the claim (3.51) should be replaced by "$\prod_{j=1}^{\mathcal{K}_0} (\mathcal{L}^m)_c \mathcal{P}_j$ is nuclear."

-On the first line of p. 104, replace "of $\mathcal{J}_\omega \phi \mathcal{M}_c \mathcal{J}'_{\omega'(\vec\eta)}$, where..." by "of the sum of $\mathcal{J}_\omega \phi \mathcal{M}_c \mathcal{J}'_{\omega'(\vec\eta)}$ with the expression on lines 3-4 of p. 103 (for $\ell \overset{\vec\eta}{\hookrightarrow} n$) modified by[1] replacing $Loc_{\omega',\vec\eta}$ by $(\mathrm{id} - Loc_{\omega',\vec\eta})$, or replacing $\overline{Loc}_{\omega,\omega',\vec\eta}$ by $(\mathrm{id} - \overline{Loc}_{\omega,\omega',\vec\eta})$, where $Loc_{\omega,\vec\eta} := A_t^{-1} \Phi_{\omega,\vec\eta} A_t$, $\overline{Loc}_{\omega,\omega',\vec\eta} := A_t^{-1} \bar\Phi_{\omega,\omega',\vec\eta} A_t$, and where..."

-In line 7 of p. 104, replace "the operators $(\mathcal{L}^m)_c$ inherit" by "the contribution of $\mathcal{M}_c$ to the operators $(\mathcal{L}^m)_c$ inherits".

-In line 8 of p. 104, replace "Finally, (3.51) follows from..." by "The fact that the sequence of approximation numbers of the contribution of $\mathcal{M}_c$ lies in $\ell^1(\mathbb{Z})$ then follows from..."

-In line 9 of p. 104 , insert "In view of Corollary A.9 and (2.40), the other contribution to $(\mathcal{L}^m)_c$ is nuclear if we take (as we may) $t' < t - d$" before "Thus..."

-p. 106: in (3.57) replace $g_{\vec\omega}^{(m)}(w)$ by $g_{\vec\omega}^{(m)}((T^m|_{E_{\vec\omega}})^{-1}w)$.

-p. 108: In (3.63), the integration is with respect to w.

-p. 109: in (3.66) replace $g_{\vec\omega}^{(m_j)}(w)$ by $g_{\vec\omega}^{(m_j)}((T^{m_j}|_{E_{\vec\omega_j}})^{-1}w)$.

-p. 109 and 113: replace $j = 1, \dots, J$ by $j = 0, \dots J$ when defining $\vec\omega$.

-p. 111: the Jacobian of (3.70) is in fact independent of the m_j which simplifies the end of this proof.

-On p. 111, claim (3.72) is for the absolute value of the flat trace.

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[1]The "or" is not exclusive.

-On p. 112, one trace and two flat traces must be replaced by their absolute values.

-On p. 112: two lines above the end of the proof of Theorem 3.5, the sum over k starts at 0, not 1.

-p. 113: one line before (3.73), it is m_0, not n_0, three lines after (3.73) it is Proposition 3.18, not Lemma 3.18. 4 lines above (3.74) it is $\omega_j \in \Omega$ instead of $\omega \in \mathcal{J}$.

-p. 113: Claim (3.74) is obtained by the bound on $|V_n^\ell(x,y)|$ on page 63 in the proof of Lemma 2.34, and the right-hand side should be replaced by

$$C \sup |g_{\overrightarrow{\omega}_j}^{(m_j)}| \cdot \theta_\omega(x)\theta_{\omega'}(y)$$

$$\cdot \int \theta_\omega(w)\theta_{\omega'}(T^{-m_j}(w))b_{\ell_{j-1}}\big(\kappa_{\omega'}(T^{-m_j}(w)) - \kappa_{\omega'}(y)\big)b_{\tilde{\ell}_j}\big(\kappa_\omega(x) - \kappa_\omega(w)\big)\mathrm{d}w\,.$$

(To obtain the unnumbered inequality after (3.77) on p. 114, use footnote 28 p. 64 about $b_\ell * b_{\tilde{\ell}}$.)

-p. 114: (3.76) only true for K_ℓ^n as an operator acting on L_∞, see error in the use of (4.24) in [31]: in line 11 of p. 63 of [31], both sides should be multiplied with a bounded function and integrated with respect to y

-P. 114: In the last factor of the right hand side of (3.77), replace $-\sum_{j=1}^J \alpha \cdots$ by $+\sum_{j=1}^J \alpha \cdots$.

-p. 115: The right-hand side of (3.78) should be replaced by

$$[C(T,g)]^{m_0}C^J \sum_{\overrightarrow{\omega}_j \in \Omega_{m_j}} \sup_{(T^{m_j}|_{E_{\overrightarrow{\omega}_j}})^{-1}y_j \in \mathrm{supp}(g_{\overrightarrow{\omega}_j}^{(m_j)})} \mathcal{G}^\alpha(y_1,\ldots y_J)\,.$$

-p. 221: In the second line of Step 5, ϕ_γ should be μ_γ; but in fact Step 5 is not needed in the proof of Theorem 7.5. (The claim in Step 5 that the eigenvalues are root of unity follows from Step 6, which does not use Step 5. To avoid using Bowen's result in Step 6, one would need to show surjectivity of $\varphi \mapsto \mu_\varphi$, as in Theorem 33 of [20].)

-p. 238: In the penultimate line, the reference should be App. A of [28] (the 2007 reference) not [31].

-p. 253: G_n should be replaced by G (twice) in the third line of the proof of Lemma B.4, and $Q_*(T, G, \lambda^{(*)}, \mathcal{W}) + 2\epsilon$ should be $Q_*(T, G, \lambda^{(*)}, \mathcal{W}, m) + \epsilon$ in the 5th line.

-p. 245: As pointed out by Crimmins and Nakano, (A.18) does not suffice to bound the 1st term in the right hand-side of (A.13) because $\mathcal{R}_0(z)$ is usually not bounded on $\mathcal{B}_0$. The same mistake occurs in the penultimate line of the proof of Theorem 8.1 in [87]. As pointed out by Gouëzel and Liverani, the theorem is still true: It suffices to use equation (11) in [109] to estimate $(z - \mathcal{L}_0)^{-1}$ This is what is done in the proof of Theorem 3.3 of [84], where a stronger statement is given.

-p. 265: In the last line replace $K(x,y)$ by $\tilde{K}(x,y)$.

-p. 279: The proof of the reconstruction claim in Lemma D.12 is incomplete. See Prop 7.2 in [28] for details.