

Lecture Notes in Mathematics Vol. 1205

ISBN 978-3-540-16784-6 © Springer-Verlag Berlin Heidelberg 2008

B.Z. Moroz

Analytic arithmetic in algebraic number fields

Errata

- p.2, last line: write " $w_p(\mathfrak{A}) = 0$ " instead of " $w_p(\mathfrak{A}) = 1$ "
- p.5, line 2: write " $\lambda \in \hat{X}^*$ " instead of " $\lambda \in X^*$ "
- p.13, formula (6): write " $\langle \chi | \psi \rangle = 0$ " instead of " $\langle \chi | \psi \rangle = 1$ "
- p.35, formula (14): write " \tilde{S}_1 " instead of " S_1 "
- p.38, formula (30): write " $(\frac{|1+s|}{2\pi})^{n/2}$ " instead of " $(\frac{|1+s|}{2\pi})^{n/2}$ "
- p.43, formula (14) and line 8: write " $\alpha \leq \dots$ " instead of " $\alpha \geq \dots$ "
- p.46, line 6: write " $O(nx \exp(\dots))$ " instead of " $O(x \exp(\dots))$ "
- p.46, line 12: write " $\psi(t) = c_4 (\log \varphi(t, \chi))^{-1}$ " instead of " $\psi(t) = c_4 \log \varphi(t, \chi)$ "
- p.47, formula (38): write " $\frac{\log T}{2\psi(t)}$ " instead of " $\frac{\log T}{\psi(t)}$ "
- p.48, line 1: write " $O(nx \exp(\dots))$ " instead of " $O(x \exp(\dots))$ "
- p.48, formula (41): write " $O(x \sum_{j=1}^m n_j \exp(\dots))$ " instead of " $O(x \sum_{j=1}^m \exp(\dots))$ "
- p.54: Lemma 2 holds only under the additional assumption that $f(\alpha) \neq 0$ and $f(s) \neq 0$ when $|s| = 9/4$
- p.56, formula (20): write " $\frac{g(\chi)}{s-1}$ " instead of " $g(\chi)(\frac{1}{s} + \frac{1}{s-1})$ "
- p.56, last line: write "... ≤ 2 , except possibly at $s = 0$, the" instead of "... ≤ 2 , the"
- p.57, formula (22): write " $R(s) = \frac{g(\chi)(r_1+r_2)}{s} + O\dots$ " instead of " $R(s) = O\dots$ "
- p.58, formula (27): write "... $g(\chi)x - \dots$ " instead of "... $g(\chi)x + \dots$ "
- p.60, line 11: write " $\mathfrak{5} \mu (\dots)$ " instead of " $\mathfrak{5} (\dots)$ "
- p.67, formula (20): write " $\omega(k)$ " instead of " $w(k)$ "
- p.83, formula (29): write " $\vec{\chi}$ " instead of " χ " (twice)
- p.84, formula (38): write " $S_0(\vec{\chi})$ " instead of " $S_0(\chi)$ "

- p.89: Theorem 1 is incorrect as it stands; it should be replaced by [103, Proposition 1]
- p.100: Lemma 2 is incorrect as it stands; it should be replaced by [103, Lemma 5]
- p.103: now a sharper version of Lemma 4 is available, see [103, Lemma 4]
- p.111, last line: write " $d_3 = 1$ " instead of " $d_3 = 2$ "
- p.127, formula (10): write " $\sum_{\mathfrak{p} \in S_0(k), |\mathfrak{p}|=p}$ " instead of " $\mathfrak{p} \in S_0(k), |\mathfrak{p}| = p$ "
- p.128, line 8: write " $E_{\mathfrak{a}}$ " instead of " E "
- p.141, line 1: write "norm-form" instead of "non-form"
- p.148, formula (37): write " $\omega(k)$ " instead of " $x(k)$ "
- p.149, formula (38): write " \geq " instead of " $>$ "
- p.152, formula (4): write " $C_1(\vec{k})$ " instead of " $C_1(k)$ "
- p.164, line 4: write " $\neq \emptyset$ " instead of " $\neq O$ "
- p.164, formula (5): write " $C_2(\vec{k}) > 0$ " instead of " $_2(\vec{k}) > 0$ "
- p.167, line 9: write " $a_j \in \mathbb{R}^{d_j}$ " instead of " $|a_j| \in \mathbb{R}^{d_j}$ "
- p.168, line 4: write "these authors, see also the two survey articles [105], [106]." instead of "these authors."
- p.168, line 3 from below: write "[53], [101]." instead of "[53]."
- p.169, line 9: write "[66] (cf. also [103])." instead of "[66]."
- p.169, last line: write "theorem II.5.1 (cf. [102])." instead of "theorem III.5.1."
- p.170, line 13: write "[98]. In the mean time Conjecture 1 has been proved [104]." instead of "[98]."
- p.174, reference [65]: write "24 (1986), pp. 272-283" instead of "to appear"
- p.174, reference [68]: write "Israel Journal of Mathematics, 60 (1987), pp. 1-21." instead of "M.P.I. für Mathematik Preprint 86-14, Bonn, 1986."
- p.176, reference [100]: write "On the number of integral points on a norm-form variety in a cube-like domain, Journal of Number Theory, 27 (1987), pp. 106-110." instead of "A footnote to my recent paper (submitted for publication)."
- p.176, add the following references:
- [101] M.D. Coleman, A zero-free region for Hecke L -functions, *Mathematica*, 37 (1990), pp. 287-304.
- [102] N. Kurokawa, On the meromorphy of Euler products, I, II, *Proceedings of the London Mathematical Society*, 53 (1988), pp. 1-47, 209-236.

- [103] B.Z. Moroz, On a class of Dirichlet series associated to the ring of representations of a Weil group, Proceedings of the London Mathematical Society, 56 (1988), pp. 209-228.
- [104] B.Z. Moroz, Equidistribution of Frobenius classes and the volumes of tubes, Acta Arithmetica, 51 (1988), p. 269-276.
- [105] B.Z. Moroz, Scalar product of Hecke L -functions and its application, Advanced Studies in pure maths, 21 (1992), pp. 153-171.
- [106] B.Z. Moroz, Scalar products of Dirichlet series and the distribution of integer points on toric varieties, Zapiski Nauchnykh Seminarov POMI, 322 (2005), pp. 135-148.