ERRATA

ON THE METRIC THEORY OF NEAREST INTEGER
CONTINUED FRACTIONS

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The problems empirically studied by the author [1] have earlier been completely solved by Rieger [2], [3] and Rockett [4]. See also [5]. Unfortunately the author was not aware of this fact.—It might be of interest to compare the numerical values arrived at in the paper with the exact results. Thus the functions $m'(t)$ and $m(t)$ in Table 1 are

$$\frac{1}{\ln G} \left(\frac{1}{G+t} + \frac{1}{G+1-t} \right), \quad \text{and} \quad \frac{1}{\ln G} \ln \frac{(G+t)(G+1)}{(G+1-t)G},$$

respectively, where $G = (1 + \sqrt{5})/2$. The numerical values given for $m(t)$ are quite accurate; the largest error is $0.64 \cdot 10^{-5}$, occurring for $t = 0.14$. The values for $m'(t)$ differ by up to 3 units in the last decimal, except the value for $m'(0)$, which differs by 4 units.

The exact value of the constant $\ln K'$ in (38) and (41) is $\pi^2/12 \ln G = 1.709\dots$. The ratio 70% at the end of subsection 17 is $\ln G/\ln 2 = 0.6942\dots$

1. H. Riesel, *On the metrix theory of nearest integer continued fractions*, BIT 27:2 (1987), pp. 248–263.
2. G. J. Rieger, *Ein Gauss-Kusmin-Lévy-Satz für Kettenbrüche nach nächsten Ganzen*, Manuscripta Math. 24 (1978), pp. 437–448.
3. G. J. Rieger, *Mischung und Ergodizität bei Kettenbrüchen nach nächsten Ganzen*, Journ. für Reine und Angew. Math. 310 (1979), pp. 171–181.
4. Andrew M. Rockett, *The metrical theory of continued fractions to the nearer integer*, Acta Arithm. 38 (1980), pp. 97–103.
5. C. Kraaikamp, *The distribution of some sequences connected with the nearest integer continued fraction*, Proc. Kon. Ned. Akad. van Wetensch. 90 (1987), pp. 177–191.