

Retraction: On Hilbert's 8th problem

Nicholas G. Polson

University of Chicago

Abstract. Two errata in the paper are given.

First, the Thorin measure constructed in (2.16) should read

$$v_\alpha(t) = \frac{1}{\sqrt{2\pi}} \int_0^\infty e^{-tz} \left(\int_0^\infty 2 \sin^2(x\sqrt{z/2}) e^{-\alpha x} \mu(dx) \right) \frac{dz}{\sqrt{\pi z}}. \quad (2.16)$$

Second, the paper of Grosswald provides results on the existence of $m_G(s)$ for a range of values of s , but not directly for the range $(-\frac{1}{2}, 0)$. This invalidates the ensuing argument and the proof of Theorem 2.

Acknowledgments

Nicholas Polson is Professor of Econometrics and Statistics at Chicago Booth. I would like to thank Frank Calegari and Greg Lawler for pointing the errata in the application of Grosswald's result on the existence of $m_G(s)$.

University of Chicago
5807 S. Woodlawn Ave.
Chicago, Illinois 60637
USA
E-mail: ngp@chicagobooth.edu