A PROBLEM CONCERNING RIEMANN SUMS

IOSIF PINELIS

Abstract. An open problem concerning Riemann sums, posed by O. Furdui, is considered.

Mathematics subject classification (2010): 26A06, 26A27, 26A42, 26A46, 60Exx, 60G15.

Keywords and phrases: Riemann sums, probabilistic method, Wiener process, Brownian motion, integrals, sequences, limits, continuity, absolute continuity, fractional part integrals.

REFERENCES

[1] V. I. BOGACHEV, Measure theory, Vol. I, II, Springer-Verlag, Berlin, 2007.
[2] E. CESÀRO, Sur la convergence des séries, Nouvelles annales de mathématiques, 7 (3): 49–59, 1888.
[3] O. FURDUI, Limits, series, and fractional part integrals, Problem Books in Mathematics, Springer, New York, 2013, Problems in mathematical analysis.
[4] P. MÖRTERS AND Y. PERES, Brownian motion, volume 30 of Cambridge Series in Statistical and Probabilistic Mathematics, Cambridge University Press, Cambridge, 2010, With an appendix by Oded Schramm and Wendelin Werner.
[5] O. STOLZ, Vorlesungen über allgemeine Arithmetik: nach den Neueren Ansichten, Teubners, 1885.