

## A PROBLEM CONCERNING RIEMANN SUMS

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*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.