



Teimuraz Akhobadze
Associate Professor
Mathematical Analysis

E-mail: teimuraz.akhobadze@tsu.ge

Phone (office): +995 322302183

Phone (mobile): +995 595546231

Education

- Doctor of science, thesis on: "On the convergence and summability of trigonometric Fourier series and integrals", I. Javakhishvili Tbilisi State University
- Graduate student, thesis on: " On the convergence of simple and multiple Fourier series, I. Javakhishvili Tbilisi State University
- Student, Faculty of Mechanics and Mathematics, I. Javakhishvili Tbilisi State University

Teaching Courses

- Calculus
- Mathematical analysis
- Theory of functions
- Fourier analysis
- Measure theory
- Complex analysis
- Functional analysis
- Hardy spaces

Research interests

- Fourier Analysis
- Approximation Theory
- Harmonic Analysis

Selected publications

1. Akhobadze Teimuraz; Gognadze Giorgi, On the asymptotic estimation of the generalized Cesàro means. *Bull. Georgian Natl. Acad. Sci. (N.S.)* 10 (2016), no. 2, 7–9.
2. Akhobadze, Teimuraz. On the generalized Cesàro means of trigonometric Fourier series. *Bull. TICMI* 18 (2014), no. 1, 75–84.
3. Akhobadze, T. On a theorem of M. Satô. *Acta Math. Hungar.* 130 (2011), no. 3, 286–308.
4. Akhobadze Teimuraz. On the approximate properties of generalized Cesàro means of conjugate trigonometric Fourier series. *Georgian Math. J.* 16 (2009), no. 3, 413–425.
5. Akhobadze Teimuraz. Lebesgue constants of generalized Cesàro (C, α_n) -means of trigonometric series. *Bull. Georgian Natl. Acad. Sci.* 175 (2007), no. 2, 24–26.

6. Akhobadze T. On the convergence of generalized Cesàro means of trigonometric Fourier series. II. *Acta Math. Hungar.* 115 (2007), no. 1-2, 79–100.
7. Akhobadze T. On the convergence of generalized Cesàro means of trigonometric Fourier series. I. *Acta Math. Hungar.* 115 (2007), no. 1-2, 59–78.
8. Akhobadze T. Generalized bounded variation of functions of multiple variables and convergence of Fourier series. *Bull. Georgian Acad. Sci.* 171 (2005), no. 1, 14–16.
9. Akhobadze T. On generalized Česàro summability of trigonometric Fourier series. *Bull. Georgian Acad. Sci.* 170 (2004), no. 1, 23–24.
10. Akhobadze T. A generalization of bounded variation. *Acta Math. Hungar.* 97 (2002), no. 3, 223–256.
11. Akhobadze T. On convergence of spherical Riesz means of multiple Fourier series and Fourier integrals. *Bull. Georgian Acad. Sci.* 165 (2002), no. 1, 14–17.
12. Akhobadze T. Relations between H_ω , $V[v]$ and $B\Lambda(p(n)\uparrow\infty, \phi)$ classes of functions. *Bull. Georgian Acad. Sci.* 164 (2001), no. 3, 433–435.
13. Akhobadze T. $B\Lambda(P(n)\uparrow\infty, \phi)$ classes of functions of bounded variation. *Bull. Georgian Acad. Sci.* 164 (2001), no. 1, 18–20.
14. Akhobadze T. Generalized $BV(P(n)\uparrow\infty, \phi)$ class of bounded variation. *Bull. Georgian Acad. Sci.* 163 (2001), no. 3, 426–428.
15. Akhobadze T. On Fourier coefficients of functions of $BV(p(n)\uparrow\infty, \phi)$ class. *Bull. Georgian Acad. Sci.* 162 (2000), no. 3, 415–417.
16. Akhobadze T. Functions of generalized Wiener classes $BV(p(n)\uparrow\infty, \phi)$ and their Fourier coefficients. *Georgian Math. J.* 7 (2000), no. 3, 401–416.
17. Akhobadze T. On Fourier coefficients of functions of generalized Wiener class. *Georgian Math. J.* 7 (2000), no. 1, 1–10.
18. Akhobadze T. On the order of Fourier coefficients of a function of generalized Wiener's class $BV(P(n)\uparrow\infty)$. *Bull. Georgian Acad. Sci.* 160 (1999), no. 3, 430–432 (2000).
19. Akhobadze T. On some analogies of Cantor-Lebesgue theorem. *Bull. Georgian Acad. Sci.* 155 (1997), no. 1, 7–8.
20. Akhobadze T. On some analogies of Riemann-Lebesgue theorem for functions of multiple variables. I. *Bull. Georgian Acad. Sci.* 154 (1996), no. 1, 17–19.
21. Akhobadze T. On the summability of multiple trigonometric series by the Bochner-Riesz method. *Bull. Georgian Acad. Sci.* 153 (1996), no. 2, 169–171.
22. Akhobadze T. On some analogies of Riemann-Lebesgue theorem for functions of multiple variables. II. *Bull. Georgian Acad. Sci.* 154 (1996), no. 2, 190–192.

23. Akhobadze T. I. On the convergence and Cesàro (C, α) -summability of trigonometric Fourier series. (Russian) *Acta Math. Hungar.* 55 (1990), no. 1-2, 3–31.
24. Akhobadze T. I. Some approximation properties of Bochner-Riesz spherical means of Fourier integrals. (Russian) *Soobshch. Akad. Nauk Gruzin. SSR* 135 (1989), no. 1, 17–20.
25. Akhobadze T. I. On the asymptotics of Cesàro means of trigonometric Fourier series of functions in the class H_ω . (Russian) *Soobshch. Akad. Nauk Gruzin. SSR* 134 (1989), no. 3, part II, 61–63.
26. Akhobadze T. I. Uniform convergence and (C, α) -summability of trigonometric Fourier series. (Russian) *Soobshch. Akad. Nauk Gruzin. SSR* 128 (1987), no. 2, 249–252.
27. Akhobadze T. I. Countably multiple Fourier series. (Russian) *Soobshch. Akad. Nauk Gruzin. SSR* 122 (1986), no. 3, 489–492.
28. Akhobadze T. I. Continuity of functions of generalized bounded variation. (Russian) *Soobshch. Akad. Nauk Gruzin. SSR* 121 (1986), no. 1, 17–20. 26A45
29. Akhobadze T. I. Continuity of a function of several variables in a class of generalized bounded variation. (Russian) *Acta Math. Hungar.* 48 (1986), no. 3-4, 317–341.
30. Akhobadze T. I. Classes of generalized bounded variation and continuity of functions in these classes. (Russian) *Reports of the extended sessions of a seminar of the I. N. Vekua Institute of Applied Mathematics, Vol. I, no. 2 (Russian) (Tbilisi, 1985)*, 17–20, 175–176, *Tbilis. Gos. Univ., Tbilisi*, 1985.
31. Akhobadze T. I. On convergence and summability of Fourier series. *Anal. Math.* 8 (1982), no. 2, 79–102. (Reviewer: S. Izumi)
32. Akhobadze T. I. Classes of functions and convergence of Fourier series. (Russian) *Acta Math. Acad. Sci. Hungar.* 37 (1981), no. 1-3, 95–119.
33. Akhobadze T. I. On some one-sided conditions for convergence and summability of Fourier series. (Russian) *Soobshch. Akad. Nauk Gruzin. SSR* 100 (1980), no. 1, 33–36
34. Akhobadze T. I. Convergence and summability of multiple trigonometric Fourier series. (Russian) *Some problems in the theory of functions, Vol. I*, 67–120, *Tbilis. Gos. Univ., Tbilisi*, 1979.
35. Akhobadze T. I. Convergence and summability of simple trigonometric Fourier series. (Russian) *Some problems in the theory of functions, Vol. I*, 5–66, *Tbilis. Gos. Univ., Tbilisi*, 1979.
36. Akhobadze, T. I. Functions of a bounded generalized second variation. (Russian) *Mat. Sb. (N.S.)* 109(151) (1979), no. 2, 291–326, 328.
37. Ahobadze T. I. Trigonometric Fourier series. (Russian) *Soobshch. Akad. Nauk Gruzin. SSR* 92 (1978), no. 3, 561–564.
38. Akhobadze T. I. Certain classes of functions, and trigonometric Fourier series. (Russian) *Sakharth. SSR Mecn. Akad. Moambe* 86 (1977), no. 1, 49–52.

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39. Akhobadze T. I. The convergence of Cesàro means of negative order for functions of bounded generalized second variation. (Russian) *Mat. Zametki* **20** (1976), no. 5, 631–644.
40. Akhobadze T. I. The convergence of Fourier series. (Russian) *Sakharth. SSR Mecn. Akad. Moambe* **70** (1973), 281–284.
41. Akhobadze T. I. The summability of Fourier series. (Russian) *Sakharth. SSR Mecn. Akad. Moambe* **72** (1973), 273–276.
42. Akhobadze T. I. The convergence of Fourier series. (Russian) *Sakharth. SSR Mecn. Akad. Moambe* **67** (1972), 545–548.