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## 🌐 Language skills

Русский English Español

## 📖 Publications

Article

### On Conditionally Universal Functions

Grigoryan M.G., Galoyan L.N.

ՀՀ ԳԱԱ Տեղեկագիր, Մաթեմատիկա ( Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences))  
2025 87-95

Article

### On Universal Pairs with Respect to Walsh System

Grigoryan M. G., Sargsyan A. A.

Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences) 2025 175-183

Article

### On the Universal Functions for Weighted Spaces

Artsrun Sargsyan, Martin Grigoryan

Trends in Mathematics 2025 185-190

Article

### On the Universal Functions for the Spaces of Measurable Functions

Lusine Simonyan, Martin Grigoryan

Trends in Mathematics 2025 199-204

Article

### On Universal Double Fourier Series ( Об универсальных двойных рядах Фурье )

Grigoryan M.G., Sargsyan A.A.

Математические заметки (MATHEMATICAL NOTES) 2025 874-879

Article

### On Universal Pairs Relative to the Vilenkin System ( Об универсальных парах относительно системы Виленкина )

M. G. Grigoryan, L. N. Galoyan, T. M. Grigoryan

Известия высших учебных заведений. Математика (Russian Mathematics) 2025 67-72

Article

### On the Behavior of Fourier Coefficients in the Trigonometric System

*Article*

**On the universal pair with respect to the generalized Walsh system**

Sergo A. Episkoposian, Martin G. Grigorian, Tigran M. Grigorian

Advances in Operator Theory 2024 1-15

---

*Article*

**Функции, почти универсальные в смысле знаков относительно тригонометрической системы и системы Уолша (Functions Almost Universal in the Sense of Signs with Respect to the Trigonometric System and the Walsh System)**

Л. Н. Галоян, М. Г. Григорян

Математические заметки (MATHEMATICAL NOTES) 2024 935-939

---

*Article*

**On the Convergence Fourier Series and Greedy Algorithm by Multiplicative System**

Grigoryan, M. G., Grigoryan T.M, Simonyan L.S

Extended Abstracts 2021/2022: Trends in Mathematics 2024 117-123

---

*Article*

**Об универсальных (в смысле знаков) рядах Фурье по системе Уолша [On universal (in the sense of signs) Fourier series with respect to the Walsh system]**

M. G. Grigoryan

Математический сборник (Sbornik Mathematics) 2024 717-742

---

*Article*

**Menshov-Type Theorem for Divergence Sets of Sequences of Localized Operators**

M. G. Grigoryan, A. Kamont, A. A. Maranjyan

Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences) 2023 81-92

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*Article*

**On the existence and structure of universal functions for weighted spaces  $L_{1\mu}[0,1]$**

M. G. Grigoryan, A.A. Sargsyan

Итоги науки и техники. Современная математика и ее приложения. Тематические обзоры (Journal of Mathematical Sciences) 2023 1-16

---

*Article*

**О рядах Фурье по кратной тригонометрической системе**

М. Г. Григорян, С. В. Конягин

Успехи математических наук (Russian Mathematical Surveys) 2023 201-202

---

*Article*

**On Universal Fourier Series in the Walsh System**

Grigoryan M.G.

Siberian Mathematical Journal 2022 868-882

---

*Article*

**On the Convergence of Negative-Order Cesàro Means of Fourier and Fourier-Walsh Series**

Grigoryan, M.G

Математические заметки (MATHEMATICAL NOTES) 2022 476-479

---

*Article*

**On Fourier Series Almost Universal in the Class of Measurable Functions**

M. G. Grigoryan

Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences) 2022 215-221

---

*Article*

**О существовании и структуре универсальных (относительно тригонометрической системы) функций**

М.Г. Григорян

СОВРЕМЕННЫЕ ПРОБЛЕМЫ ТЕОРИИ ФУНКЦИЙ И ИХ ПРИЛОЖЕНИЯ 2022 122-125

---

*Article*

**ON ALMOST UNIVERSAL DOUBLE FOURIER SERIES**

Grigoryan, Martin Gevorg

Труды института математики и механики УрО РАН (Trudy Instituta Matematiki i Mekhaniki UrO RAN) 2022 91-102

---

*Article*

**ON THE CONVERGENCE OF BOCHNER-RIESZ'S SPHERICAL MEANS OF FOURIER DOUBLE INTEGRALS**

M. G. GRIGORYAN, L. S. SIMONYAN

The Journal of the Indian Mathematical Society 2021 88-96

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*Article*

**О СУЩЕСТВОВАНИИ И СТРУКТУРЕ УНИВЕРСАЛЬНЫХ ФУНКЦИЙ**

М. Г. Григорян

Доклады Российской академии наук. Математика, информатика, процессы управления (Doklady Mathematics) 2021 30-33

---

*Article*

**Функции, универсальные относительно тригонометрической системы**

М. Г. Григорян, Л. Н. Галоян

Известия РАН. Серия математическая (IZVESTIYA MATHEMATICS) 2021 73-94

---

*Article*

**Approximations in L1 with convergent Fourier series.**

Martin Grigoryan, Zhirayr Avetisyan, Michael Ruzhansky

Mathematische Zeitschrift 2021 1907 - 1927

---

*Article*

**ON UNCONDITIONAL AND ABSOLUTE CONVERGENCE OF THE HAAR SERIES IN THE METRIC OF  $L_p[0, 1]$  WITH  $0 < p < 1$**

M. G. Grigoryan

Сибирский математический журнал (Siberian Mathematical Journal) 2021 607-615

---

*Article*

**On the Divergence of Fourier Series in the General Haar System**

M. G. Grigoryan, A. A. Maranjyan

Armenian Journal of Mathematics 2021 1-10

---

*Article*

**ОБ УНИВЕРСАЛЬНЫХ РЯДАХ ФУРЬЕ—УОЛША**

М. Г. ГРИГОРЯН

Итоги науки и техники. Современная математика и ее приложения. Тематические обзоры (Journal of Mathematical Sciences) 2021 45-57

---

*Article*

**О сходимости квадратичных частных сумм кратного ряда Франклина к бесконечности**

Г.Г. Геворкян, М.Г. Григорян

Известия НАН РА. Математика (Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences)) 2020 9-18

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*Article*

**Functions, universal with respect to the classical systems**

Martin G. Grigoryan

Advances in Operator Theory 2020 1414 - 1433

---

*Article*

**АБСОЛЮТНАЯ СХОДИМОСТЬ ДВОЙНЫХ РЯДОВ ФУРЬЕ -ФРАНКЛИНА**

Г. Г. Геворкян, М. Г. Григорян

Сибирский математический журнал (Siberian Mathematical Journal) 2020 513-527

---

*Article*

**Функции с универсальными рядами Фурье-Уолша**

М.Г. Григорян

Математический сборник (Sbornik Mathematics) 2020 107-131

---

*Article*

**UNIVERSAL FUNCTIONS WITH RESPECT TO THE DOUBLE WALSH SYSTEM FOR CLASSES OF INTEGRABLE FUNCTIONS**

M. Grigoryan, A. Sargsyan

Analysis Mathematica 2020 367-392

---

*Article*

**ON THE UNIFORM CONVERGENCE OF DOUBLE FOURIER-WALSH SERIES**

G. G. GHAZARYAN, M. G. GRIGORYAN, A. L. GHAZARYAN

Proceedings of the YSU A. Physical and Mathematical Sciences 2020 20-28

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*Article*

**Universal Fourier Series**

M. G. Grigoryan

MATHEMATICAL NOTES 2020 282-285

---

*Article*

## **ФУНКЦИИ УНИВЕРСАЛЬНЫЕ ОТНОСИТЕЛЬНО КЛАССИЧЕСКИХ СИСТЕМ**

М. Г. Григорян

СОВРЕМЕННЫЕ ПРОБЛЕМЫ ТЕОРИИ ФУНКЦИЙ И ИХ ПРИЛОЖЕНИЯ 2020 137-144

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*Article*

### **Функции универсальные относительно системы Уолша**

М.Г.Григорян

Известия НАН РА. Математика (Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences))

2020 51-67

---

*Article*

### **Application of negative order Cesàro summability methods to Fourier-Walsh series of functions from $L^\infty[0,1]$**

Martin Grigoryan, Levon Galoyan

Colloquium Mathematicum 2019 195-212

---

*Article*

### **Квазибезусловная базисность системы Фабера - Шаудера**

Г.М. Григорян, В. Г. Кротов

Український математичний журнал (Ukrainian Mathematical Journal) 2019 210-219

---

*Article*

### **On Fourier series that are universal modulo signs**

Martin Grigoryan, Levon Galoyan

Studia Mathematica 2019 215-231

---

*Article*

### **Convergence of Fourier-Walsh Double Series in Weighted $L_p \mu[0, 1]^2$**

Martin G. Grigoryan, Tigran M. Grigoryan, L. S. Simonyan

Springer Proceedings in Mathematics & Statistics 2019 109-136

---

*Article*

### **On the structure of universal functions for classes $L_p[0,1]^2, p \in (0,1)$ , with respect to the double Walsh system**

Martin Grigoryan, Artsrun Sargsyan

Banach Journal of Mathematical Analysis 2019 647-674

---

*Article*

### **Universal functions for classes $L_p[0,1]^2, p \in (0,1)$ , with respect to the double Walsh system**

Martin Grigoryan, Artsrun Sargsyan

Positivity 2019 1261-1280

---

*Article*

### **Двойные универсальные ряды Фурье**

М. Г. Григорян, Л. С. Симонян

Известия НАН РА. Математика (Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences))

2019 42-53

---

*Article*

**On the Absolute Convergence of Fourier-Haar Series in the Metric of  $L_p(0, 1)$ ,  $0 < p < 1$**

M. G. Grigoryan

Итоги науки и техники. Современная математика и ее приложения. Тематические обзоры (Journal of Mathematical Sciences)  
2019 844-858

---

*Article*

**ON THE UNIVERSAL FUNCTION FOR WEIGHTED SPACES  $L_p [0; 1]$ ,  $p < 1$**

MARTIN GRIGORYAN, TIGRAN GRIGORYAN, ARTSRUN SARGSYAN

Banach Journal of Mathematical Analysis 2018 104-125

---

*Article*

**On the universal functions**

M.G. Grigoryan, L.N. Galoyan

Journal of Approximation Theory 2018 191-208

---

*Article*

**The structure of universal functions for  $L_p$ -spaces,  $p \in (0, 1)$**

M. G. Grigoryan, A. A. Sargsyan

SBORNIK MATHEMATICS 2018 35-55

---

*Article*

**On the  $L_1$ -convergence and behavior of coefficients of Fourier-Vilenkin series**

M. G. Grigoryan, S. A. Sargsyan

Positivity 2018 897-918

---

*Article*

**Almost Everywhere Convergence of Greedy Algorithm with Respect to Vilenkin System**

M. G. Grigoryan, S. A. Sargsyan

Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences) 2018 331-345

---

*Article*

**ON BEHAVIOR OF FOURIER COEFFICIENTS AND UNIFORM CONVERGENCE OF FOURIER SERIES IN THE HAAR SYSTEM**

M. G. GRIGORYAN, A. KH. KOBELYAN

Advances in Operator Theory 2018 781-793

---

*Article*

**The Fourier-Faber-Schauder Series Unconditionally Divergent in Measure**

M. G. Grigoryan, A. A. Sargsyan

Siberian Mathematical Journal 2018 835-842

---

*Article*

**On the fourier-vilenkin coefficients**

Stepan Sargsyan, Martin G. Grigoryan

Acta Mathematica Scientia 2017 1-9

<https://www.journals.elsevier.com/acta-mathematica-scientia/>

---

*Article*

**Universal function for a weighted space  $L_1 \mu[0, 1]$**

Artsrun Sargsyan,, Martin Grigoryan

Positivity 2017 1-26

<https://link.springer.com/journal/11117>

---

*Article*

**ON THE UNIVERSAL AND STRONG ( $L_1$ ;  $L_1$ )-PROPERTY RELATED TO FOURIER{WALSH SERIES**

Martin G. Grigoryan

Banach Journal of Mathematical Analysis 2017 15 pages

<https://www.emis.de/journals/BJMA/>

---

*Monograph*

**Ряды по классическим системам**

Мартин Григорян

2017 329

---

*Article*

**О поведении коэффициентов Фурье по системе Уолша.**

Григорян М.Г., Навасардян К.А.

ՀՀ ԳԱԱ Տեղեկագիր, Մաթեմատիկա ( Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences))

2016 3-20

<http://jmath.sci.am/index.php/rus>

---

*Article*

**Универсальные функции в задачах “исправления”, обеспечивающего сходимость рядов Фурье-Уолша**

М. Г. Григорян, К. А. Навасардян

Известия РАН. Серия математическая (IZVESTIYA MATHEMATICS) 2016 65-91

<http://www.mathnet.ru/eng/izv>

---

*Article*

**On the m-term best approximation of functions and greedy algorithm**

Martin Grigroyan

International journal of pure mathematics 2016 26-33

<http://www.naun.org/cms.action?id=6985>

---

*Article*

**On the L-strong and greedy property of trigonometric system**

MARTIN GRIGORYAN

ADVANCES in MATHEMATICS and STATISTICAL SCIENCES. Proceedings of the 3rd International Conference on Mathematical, Computational and Statistical Sciences (MCSS '15)

2016 166-171

<http://www.wseas.us/e-library/conferences/2015/Dubai/MCSS/MCSS-00.pdf>

---

*Article*

**On existence of a universal function for  $L_p[0, 1]$  with  $p \in (0, 1)$**

M. G. Grigoryan, A. A. Sargsyan

Siberian Mathematical Journal 2016 796-808

<http://www.springer.com/mathematics/journal/11202>

---

*Article*

**On the universal function for the class  $L_p[0; 1]$ ; p 2 (0; 1),**

M. G. Grigoryan, A.A.Sargsyan

Journal of Functional Analysis 2016 3111-3133.

<http://www.sciencedirect.com/science/journal/00221236>

---

*Article*

**On the uniform convergence of negative order Cesaro means of Fourier series.**

M.G. Grigoryan,, L.N.Galoyan

Journal of Mathematical Analysis and Applications 2016 554-567

<http://www.journals.elsevier.com/journal-of-mathematical-analysis-and-applicati...>

---

*Article*

**Universal functions in 'correction' problems guaranteeing the convergence of Fourier-Walsh series**

M. G. Grigoryan, K.A.Navasardyan

IZVESTIYA MATHEMATICS 2016 1057-1083

<http://iopscience.iop.org/journal/1064-5632>

---

*Article*

**On Behavior of Fourier Coefficients by Walsh System**

M. G. Grigoryan, K.A.Navasardyan

Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences) 2016 1-13

<http://www.allertonpress.com/journals/sam.htm>

---

*Article*

**Convergence of Fourier series in classical systems**

L.N Galoyan,, M.G Grigoryan,, A.Kh. Kobelyan

SBORNIK MATHEMATICS 2015 941-979

<http://iopscience.iop.org/journal/1064-5616>

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