

Aghavni Albert Kutuzyan

Research Institute of Physics

Laboratory of Ultrafast Optics and Photonics

Head of laboratory

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🎓 Education

Institution	Yerevan State University
Faculty	Department of Physics
Date	2000 - 2005
Degree name	PhD student

Institution	Yerevan State University
Faculty	Department of Physics
Date	1998 - 2000
Degree name	Masters

Institution	Yerevan State University
Faculty	Probate-investigator
Date	1996 - 1998
Degree name	Qualified specialist

Institution	Yerevan State University
Faculty	Department of Physics
Date	1991 - 1996
Degree name	Bachelor

🎓 Scientific Rank/degree

Institution	Yerevan State University
Date	2005
Degree name	Candidate
Specialty	Physico-mathematical sciences
Scientific Supervisor	Լևոն Մուրադյան
Research Topic	Գերկար լազերային իմպուլսների սպեկտրալ սեղման որոշ առանձնահատկությունների վերլուծությունը

🌐 Language skills

Հայերեն English Русский

Work experience

Institution	Yerevan State University
Period of time	2018 till now
Rank/degree	Scientific Director Laboratory of Ultrafast Optics and Photonics

Institution	Yerevan State University
Period of time	2016 till now
Rank/degree	Associate Professor

Scientific interests

- Ultrafast optics and laser physics, Nonlinear fiber optics, Optical solitons and similaritons

Publications

Article

Self-referencing similariton-based spectral interferometry for ultrashort pulse complete characterization

Aram Zeytunyan, Garegin Yesayan, Levon Mouradian, Aghavni Kutuzyan

Optics Communications 2024 130059

Article

Generation of a New Type of Similaritons in Optical Fibers [Генерация нового типа симиляритонов в оптических волокнах]

A. Kutuzyan, V. Avetisyan, M. Sukiasyan

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024 36-40

Article

ՄԴԵԿՏՐՈՒԹՅԱՆ ՓՈՒԼԻ ԾԵՂՈՒՄՆԵՐԻ ԵՎ ԱՂԱՎԱՂՈՒՄՆԵՐԻ ԱԶԴԵՑՈՒԹՅՈՒՆԸ ԳԵՐԿԱՐՃ ԻՄՊՈՒԼՍԻ ՏԵՍԵՐ ԿՐԱ

Ավետիսյան Աննա, Ավետիսյան Վարդան, Կուտուզյան Աղավնի

Գալվառի պետական համալսարանի գիտական հոդվածների ժողովածու 2024 87-97

Article

Influence of Noise Distortions of the Spectral Phase on the Profile of an Ultrashort Pulse [Влияние шумовых искажений спектральной фазы на профиль ультракороткого импульса]

V. Avetisyan, M. Sukiasyan, A. Avetisyan, A. Kirakosyan, A. Kutuzyan

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024 149-153

Article

Self-Formation of Temporal Dark Solitons in a Single-Mode Optical Fiber [Самоформирование временных темных солитонов в одномодовом оптическом волокне]

A. Kutuzyan, M. Sukiasyan, Ar. Kirakosyan, V. Avetisyan

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024
238-243

Article

Spectral Self-Compression of Chirp-Free Pulses in Anomalous Dispersive Optical Fibers

Minas Sukiasyan, Vardan Avetisyan, Aghavni Kutuzyan

Photonics 2023 1207

Article

Formation of a new type of self-similar pulses in optical fibers with anomalous dispersion

Aghavni Kutuzyan, Vardan Avetisyan, Meri Kalashyan, Minas Sukiasyan

Optics InfoBase Conference Papers (Frontiers in Optics) 2022 185766

Article

Measurement of the ultrashort pulse spectral phase based on dispersive Fourier transformation

MINAS SUKIASYAN, NAREK KARAPETYAN, HRACH TONEYAN, AGHAVNI KUTUZYAN, LEVON MOURADIAN

Applied Optics 2019 2817-2822

Article

Similaritonic Method on Ultrashort Pulse Duration Measurement by Oscilloscope

M.M. Sukiasyan, N. P. Karapetyan, H.A. Toneyan, A.A. Kutuzyan, L.Kh. Mouradian

Armenian Journal of Physics 2019 107-112

Article

Soliton-effect Spectral Self-compression for Different Initial Pulses

Armire Grigoryan, Aghavni Kutuzyan, Garegin Yesayan

Progress in Physics 2018 35-37

Article

ЧИСЛЕННОЕ ИССЛЕДОВАНИЕ ПРОЦЕССА ФОРМИРОВАНИЯ СПЕКТРОНА: ФАЗОВЫЕ ОСОБЕННОСТИ

Н. КАРАПЕТЯН, Г. ТОНЕЯН, А. КУТУЗЯН, М. СУКИАСЯН, В. АВЕТИСЯН, Д. ГУЛКАНЯН, К. АПРЕСЯН,
Л. МУРАДЯН

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2018
173-180

Article

Spectral Characteristics of Nonlinear-Dispersive Similariton Generated in Single-Mode Fiber without Gain

H. Toneyan, K. Manoukyan, M. Sukiasyan, A. Kutuzyan, L. Mouradian

Armenian Journal of Physics 2017 192-198

Article

Spectral domain soliton-effect self-compression

A.P. Grigoryan, G.L.Yesayan, A.A.Kutuzyan, L.Kh.Mouradian

Journal of Physics: Conference Series 2016 12015

<http://iopscience.iop.org/journal/1742-6596>

Conference

Spectral Peculiarities of Nonlinear-Dispersive Similariton

Karapet Manukyan, Aghavni Kutuzyan, Levon Mouradian

Conference

Solitonic Self-Spectral Compression of Noisy Supercontinuum Radiation

Hrach Toneyan, Minas Sukiasyan, Levon Mouradian, Aghavni Kutuzyan, Vardan Avetisyan,

Arsham Eremyan

Conference

Spectron's phase peculiarities: numerical study

N.Karapetyan, H.Toneyan, A.Kutuzyan, L.Mouradian

Conference

Numerical analysis of spectron phase peculiarities

Narek Karapetyan et al, Levon Mouradian, Hrach Toneyanan, Aghavni Kutuzyan

Conference

Experimental Demonstration of Self-Spectral Compression of Supercontinuum's Fraction by 4.1x

V. Avetisyan, M. Sukiasyan, H. Toneyan, A. Kutuzyan, A. Yeremyan, L. Mouradian

Conference

Solitonic Spectral Self-Compression of Regular and Randomly Modulated Pulses

M.Sukiasyan, H.Toneyan, A.Kutuzyan, V.Tsakanov, L. Mouradian

Conference

Numerical Study of Femtosecond Signal Spectral Self Compression

Minas Sukiasyan, Aghavni Kutuzyan, Levon Kh. Mouradian, Hrach Toneyan,, Vardan Avetisyan

Conference

Phase Regularities of Spectron: Numerical Analysis

Narek Karapetyan, Aghavni Kutuzyan, Levon Kh. Mouradian, Hrach Toneyan

Conference

Similariton Based Technique for Determination of Femtosecond Pulse Duration

Karapet Manukyan,, Aghavni Kutuzyan, Levon Kh. Mouradian

Conference

4.1x Solitonic Self-Spectral Compression of Supercontinuum's Fraction

Minas Sukiasyan, Vardan Avetisyan, Hrach Toneyan, Aghavni Kutuzyan, Arsham Yeremyan,

Levon Kh. Mouradian

Conference

Solitonic Self-Spectral Compression of Supercontinuum Fraction

Vardan Avetisyan, Minas Sukiasyan, Levon Kh. Mouradian, Arsham Yeremyan, Aghavni Kutuzyan,

Hrach Toneyan

Conference

NUMERICAL STUDY OF FEMTOSECOND SIGNAL SPECTRAL SELF-COMPRESSION

Minas Sukiasyan, Hrach Toneyan, Vardan Avetisyan, Aghavni Kutuzyan, Levon Kh. Mouradian

Conference

SIMILARITON BASED TECHNIQUE FOR DETERMINATION OF FEMTOSECOND PULSE DURATION

Karapet Manukyan, Hrach Toneyan, Minas Sukiasyan, Aghavni Kutuzyan, Levon Kh. Mouradian

Conference

Solitonic Self-Spectral Compression of Noisy Supercontinuum Radiation

Hrach Toneyan, Minas Sukiasyan, Vardan Avetisyan, Aghavni Kutuzyan, Arsham Yerehyan,

Levon Kh. Mouradian

Conference

Spectron and Dispersive Fourier Transformation: Phase Aspect

N. Karapetyan, M. Sukiasyan, H. Toneyan, A. Kutuzyan, L. Kh. Mouradian

Conference

Spectral phase measurement based on spectron shaping

N. Karapetyan, M. Sukiasyan, H. Toneyan, A. Kutuzyan, L. Mouradian

Conference

Determination of the Spectral Phase of Femtosecond Pulses based on Frequency-to-Time mapping

Minas Sukiasyan, Aghavni Kutuzyan

Patent

Լազերային գերկարճ իմպուլսների սպեկտրալ փուլի որոշման եղանակ

Աղավնի Կուստուբյան, Մինաս Սուքիասյան, Վարդան Ավետիսյան, Մերի Քալաշյան

Conference

The influence of spectral phase noise in the laser pulse reconstruction

Anna Avetisyan, Minas Sukiasyan, Arthur Kirakosyan, Aghavni Kutuzyan

Conference

Noise sensitivity in the spectral phase measurement technique based on dispersive Fourier transform

M. Sukiasyan, A. Avetisyan, A. Kutuzyan

Conference

THE INFLUENCE OF SPECTRAL PHASE VARIATIONS AND DISTORTIONS ON THE ULTRASHORT PULSE PROFILE

AVETISYAN ANNA, KUTUZYAN AGHAVNI, AVETISYAN VARDAN

Conference

Evaluating the Impact of Linear Correction on Spectral Phase Reconstruction

M. Papyan, L. Mikaelyan, M. Sukiasyan, A. Kutuzyan

Conference

Formation of a Functionally Unique Type of Similariton in Optical Fibers

Michael Papyan, Lilit Mikaelyan, Minas Sukiasyan, Aghavni Kutuzyan

Conference

Assessing the Influence of Linear Compensation on Reconstruction of the Spectral Phase Profile

Lilit Mikaelyan, Michael Papyan, Minas Sukiasyan, Aghavni Kutuzyan

Conference

Effect of Weak Nonlinearity on Dispersion-Induced Pulse Broadening in Optical Fibers

Aghavni Kutuzyan, Minas Sukiasyan, Vardan Avetisyan, Karen Apresyan, Meri Kalashyan
