Anahit Rafiki Balabekyan

Միջուկային ֆիզիկայի և աստղաֆիզիկայի կենտրոն
Հեռանկարային հետազոտությունների միջազգային կենտրոն
Head of the center

Research Institute of Physics
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Head of the center

Institute of Physics
Chair of Nuclear Physics and Astrophysics
Professor

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Education

Institution	Yerevan State University
Faculty	Physics/Nuclear Physics
Date	1973 - 1978
Degree name	Qualified specialist

Scientific Rank/degree

Institution	Yerevan State University
Date	2019
Degree name	Professor

Date	2010
Degree name	Doctor
Research Topic	Nuclear reactions on medium-weight separated isotopes and on heavy radioactive nuclei

Date	1993
Degree name	Candidate
Scientific Supervisor	A.H.Khudaverdyan, A.S.Danagulyan
Research Topic	"Photospallation of tin isotopes and investigation of the simple reactions by bremsstrahlung photons with maximum energy Emax = 4.5GeV

Language skills

Հայերեն Русский English

Work experience

Institution	Yerevan State University, International Center of Advanced Stydies
Period of time	2025 - 2029
Rank/degree	Head

Institution	Yerevan State University, Chair of Nuclear Physics
Period of time	2013 - 2024
Rank/degree	Head of Chair

Institution	Yerevan State University, Chair of Nuclear Physics
Period of time	2003 - 2013
Rank/degree	associate professor

Institution	Joint Institute of Nuclear Research, Laboratory of Nuclear Problem
Period of time	1995 - 2005
Rank/degree	Senior Researcher

Institution	Yerevan State University, Laboratory of Hight Energy
Period of time	1988 - 1995
Rank/degree	Researcher

Institution	Yerevan State University, Chair of Nuclear Physics
Period of time	1978 - 1988
Rank/degree	senior Assistant

Membership

Institution	National Laboratory after A.Alikhanyan, Dissertation Council N024
Period of time	2018 - 2026

Institution	Yerevan State University, Department of Physics
Period of time	2013 - 2026

State awards and honorary titles

2026 Gold medal of YSU

Publications

Article

RARE CLUSTERING PROCESSES IN NUCLEI IN THE INTERMEDIATE MASS RANGE [Редкие процессы кластеризации ядер в области средних масс]

A. R. Balabekyan, G. H. Hovhannisyan, S. V. Gaginyan, S. G. Poghosyan, M. A. Khachatryan,

E. L. Karapetyan, J. R. Drnoyan, K. Katovsky

Journal of Contemporary Physics (Armenian Academy of Sciences) 2026 1–5

https://link.springer.com/article/10.1134/S1068337226700283

Article

Proton induced reactions on 118Sn target at energies up to 18 MeV

G. H. Hovhannisyan, N. S. Gharibyan, T. M. Bakhshiyan, A. R. Balabekyan, S. V. Gaginyan,

G. V. Martirosyan, A. Manukyan, R. K. Dallakyan, A. Aprahamian

The European Physical Journal A 2026 81

https://doi.org/10.1140/epja/s10050-026-01849-w

Article

Low-pressure multi-wire proportional chamber-based fission-fragment sensitive detection system: application in nuclear forensic analysis

A.R. Balabekyan, G.H. Hovhannisyan, S.V. Gaginyan, G.M. Ayvazyan, H.G. Zohrabyan, V.H. Kakoyan,

A.T. Margaryan

The European Physical Journal Special Topics 2025 123504

Article

Extended Lead Target for Studying the Perspectives of the Accelerator-Driven Subcritical Reactor

Anahit Balabekyan, Mihaela Paraipan, Azizbek Abduvaliev, Oleg V. Belov, Feruzjon H. Ergashev,

Vafa M. Javadova, Sergey V. Korneev, Latchesar K. Kostov, Sergey A. Kulikov, Jurabek H. Khushvaktov,

Alexandr A. Solnyshkin, Vladimir V. Sorokin, Toan N. Tran, Sergey Tyutyunnikov

Nuclear Science and Engineering 2025 15

https://www.tandfonline.com/doi/full/10.1080/00295639.2025.2522570

Article

Investigation of photonuclear reactions on isotopes 51V, natCu, natMo, 115In and 207Pb at photon energy Eγmax= 20–70 MeV

A.R.Balabekyan, S.Gaginyan, A.Aleksanyan, S.Amirkhanyan, L.Poghosyan, N.A.Demekhina, G.Avdalyan

Radiation Physics and Chemistry 2023 110651

Article

Proton induced reactions on 114Sn and 120Sn targets at energies up to 18 MeV

G. H. Hovhannisyan, A. R. Balabekyan, G. V. Martirosyan, T. M. Bakhshiyan, R. K. Dallakyan

The European Physical Journal A 2023 161

Article

ЭКСПЕРИМЕНТАЛЬНАЯ УСТАНОВКА НА ОСНОВЕ LPMWPC И SSD ДЕТЕКТОРОВ ДЛЯ РЕГИСТРАЦИИ И ИДЕНТИФИКАЦИИ АЛЬФА-ЧАСТИЦ И ОСКОЛКОВ ДЕЛЕНИЯ

А.Р. БАЛАБЕКЯН, Г.О. ОГАНЕСЯН, С.В. ГАГИНЯН, Г. М. АЙВАЗЯН, Г.Г. ЗОГРАБЯН, В.О. ХАЧАТРЯН,

Г.С. ВАРТАНЯН, А. Т. МАРГАРЯН

Proceedings of NAS RA Physics 2023 503-508

Article

Experimental Installation Based on LPMWPC and SSD Detectors for Registration and Identification of Alpha Particles and Fission Fragments

A.R. Balabekyan, G. H. Hovhannisyan, S.V. Gaginyan, G. M. Ayvazyan, H. G. Zohrabyan, H. S. Vardanyan, V. H. Khachatryan, A. T. Margaryan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 321–325

Conference

ԾԱՆՐ ՄԻՋՈՒԿՆԵՐԻ ԻՆՔՆԱԿԱՄ ԵՎ ՀԱՐԿԱԴՐԱԿԱՆ ԲԱԺԱՆՄԱՆ ՀԱԶՎԱԳՅՈՒՏ ՊՐՈՑԵՍՆԵՐ
Բալաբեկյան Ա.Ռ., Հովհաննիսյան Գ.Հ., Գագինյան Ս.Վ., Զոհրաբյան Հ.Գ., Խաչատրյան Պ.Ա

2023 171 - 171

https://www.ysu.am/conference/770

Article

Production of 47Sc in photonuclear reactions on natTi targets at the bremsstrahlung endpoint energy of 30 and 40 MeV
G.H. Hovhannisyan, T.M. Bakhshiyan, A.R. Balabekyan, I.A. Kerobyan

Applied Radiation and Isotopes 2022 110138

Article

Investigations at the LUE-75 Linear Accelerator Facility of A.I. Alikhanyan National Science Laboratory
A.S. Hakobyan, H.H. Marukyan, I. A. Kerobyan, H. R. Gulkanyan, L. A. Poghosyan, V. S. Pogosov, H. T. Torosyan, A. Z. Babayan, L. R. Vahradyan, A. R. Balabekyan, G. H. Hovhannisyan, R. K. Dallakyan, K. Katovsky

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 209-217

Article

Ծանր միջուկների բաժանման հազվագյուտ պրոցեսներ
Գոհար Հովհաննիսյան, Անահիտ Բալաբեկյան, Ամուր Մարգարյան

Գիտության աշխարհում 2022 36-43

Article

A Study of Alpha Particle Production in Photonuclear Reactions at Photon Energies of 21 and 40 MeV
A. R. Balabekyan, N. A. Demekhina, E. Melyan, S. Faltajanyan, A. Aleksanyan, S. Amirkhanyan, H. Gulkanyan, T. Kotanjyan, A. S. Hakobyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 1-7

Article

Isovector pair correlations in analytically solvable models
A. Balabekyan, G. Nikoghosyan, E. A. Kolganova, R. V. Jolos, D. A. Sazonov

International journal of Modern physics E 2020 2050091

Article

The Study of Photoproduction of Cobalt Radioisotopes from Copper Nuclei
A. Y. Aleksanyan, S. M. Amirkhanyan, A. Balabekyan, N. A. Demekhina, H. R. Gulkanyan, T. V. Kotanjyan, V. Mangasaryan, V. S. Pogosov, L. A. Poghosyan, S. Faltajanyan

Proceedings of NAS RA Physics 2020 275-283

Conference

Determination of photoneutron production from different targets irradiated by electron beam

Melyan E., Katovsky K., Kral D., Zeman M., Svoboda J., Balabekyan A., Gaginyan S., Poghosyan L., Marukyan H., Manukyan A.

2020 54101744

https://inis.iaea.org/search/search.aspx?orig_q=RN:54101744

Article

Spallation reactions induced by 4.4 GeV deuterons on lead isotopes

S V Gaginyan, A R Balabekyan, G S Karapetyan, N A Demekhina, J R Drnoyan, V I Zhemenik, J Adam, L Zavorka, A A Solnyshkin, V M Tsoupko-Sitnikov, J Khushvaktov, V Pronskikh, V M Zhamkochyan, V Guimarães, A Deppman

Journal of Physics G: Nuclear and Particle Physics 2019 095103(1-23)

Article

Fragment production in proton–induced reaction on 209Bi target at intermediate energy range

A. R. Balabekyan, G. S. Karapetyan, E. Andrade-II, A. Deppman, S. V. Gaginyan, E. Melyan, J. R. Drnoyan, V. I. Zhemenik, J. Adam, L. Zavorka, A. A. Solnyshkin, V. M. Tsoupko-Sitnikov, J. Khushvaktov, E. B. Hernández

Physical review. C 2019 024616(1-9)

Conference

NUCLEAR REACTIONS OF DEUTERONS WITH SEPARATED LEAD ISOTOPES AT 2.2 GEV/NUCLEON ENERGIES

A.R. Balabekyan, S.V.Gaginyan, N.A.Demekhina, G.S.Karapetyan

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https://nrpm.yerphi.am/

Conference

PHOTOPRODUCTION OF ALFA-PARTICLES FOR MEDIUM WEIGHT AND HEAVY NUCLEI IN ENERGY RANGE 20-40 MEV

A.R.Balabekyan, E. Melyan, S. Faltajanyan, N.A. Demekhina, A. Aleksanyan, S. Amirkhanyan, H. Gulkanyan, T. Kotanjyan

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THE STUDY OF PHOTOPRODUCTION OF COBALT RADIOISOTOPES FROM COPPER NUCLEI

A. Balabekyan, A. Aleksanyan, S. Amirkhanyan, N. Demekhina, S. Faltajanyan, H. Gulkanyan, T. Kotanjyan, V. Mangasaryan, L. Poghosyan, V. Pogosov

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Reaction rates determination for activation detectors in neutron spectrum generated by 70 MeV electrons

Zeman, M., Holomb, R., Katovsky, K., KraI, D., Melyan, E., Stastny, O., Svoboda, J., Balabekyan, A., Gaginyan, S., Haysak, I.

2019 114-125

https://inis.iaea.org/search/search.aspx?orig_q=RN:52031642

Textbook

Միջուկային փոխազդեցություններ

Անահիտ Բալաբեկյան

2019 142

Article

Reactions 11B +209 Bi at energies above Coulomb barrier

A.R. Balabekyan, N.A. Demekhina, Yu. E. Penionzhevich, N. K. Skobelev, S.M. Lukyanov, V. Burjan

EURASIAN JOURNAL OF PHYSICS AND FUNCTIONAL MATERIALS 2018 6-16

Article

Systematic study of fission modes in the proton-induced fission of actinide and pre-actinide

A R Balabekyan, E Andrade, G S Karapetyan, A Deppman, J L Bernal-Castillo, Valdir Guimaraes, J Adam,

F Garcia, F Guzman

Journal of Physics G: Nuclear and Particle Physics 2018 015105(1-24)

Article

Isotopic Dependence of Fragment Production Cross Sections in the Reactions of Deuterons on Enriched Lead and Tin Isotopes

A. R. Balabekyan, G. Karapetyan, N. A. Demekhina, S. V. Gaginyan, D.R.Drnoyan, V. I. Zhemenik, J.Adam,

L.Zavorka, A. A. Solnyshkin, V. M. Tsoupko-Sitnikov, J. Khushvaktov

Physics of Atomic Nuclei 2018 804-809

Article

Isomer production in intermediate-energy deuteron-induced reactions on a gold target

A.R. Balabekyan, G.S.Karapetyan, N. A. Demekhina, D. R. Drnoyan, V. I. Zhemenik, J. Adam, L. Zavorka,

A. A. Solnyshkin, V. M. Tsoupko-Sitnikov, V. Guimar˜aes, A. Deppman

Physical review. C 2016 054614-1-054614-

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Article

МЕТОД НАВЕДЕННОЙ АКТИВНОСТИ ДЛЯ ИССЛЕДОВАНИЯ ЯДЕРНЫХ РЕАКЦИЙ НА ИЗОТОПАХ Pb И Sn

А.Р. БАЛАБЕКЯН, С.В. ГАГИНЯН, Дж.Р. ДРНОЯН

Proceedings of NAS RA Physics 2016 291–299

http://www.flib.sci.am/eng/Fizika/Frame.html

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Աստղերի էներգիայի աղբյուրը

Ա.Ռ. Բալաբեկյան, Է.Լ. Կարապետյան

Բնագետ 2016 66-72

http://www.ysu.am/bnaget

Article

Interaction of 11B with 209Bi and 181Ta targets at intermediate energies.

A.R.Balabekyan, G.S.Karapetyan, A.Deppman, V.Guimaraes, N.A.Demekhina

Physical review. C 2016 024618-1-8

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Study manual

Միջուկային ռեակցիաներ
Ա.Ռ.Բալաբեկյան
2013 75