Susanna Vardan Gaginyan

Միջուկային ֆիզիկայի և աստղաֆիզիկայի կենտրոն
Հեռանկարային հետազոտությունների միջազգային կենտրոն
Scientific Worker

Research Institute of Physics
Միջուկային ֆիզիկայի և աստղաֆիզիկայի կենտրոն
Հեռանկարային հետազոտությունների միջազգային կենտրոն
Scientific Worker

Institute of Physics
Chair of Nuclear Physics and Astrophysics
Lecturer on an hourly basis

23-47
susgaginyan@ysu.am

Education

Institution	Yerevan State University
Faculty	nuclear physics
Date	2012 - 2014
Degree name	Masters

Scientific Rank/degree

Institution	A.I. Alikhanyan National Science Laboratory (Yerevan Physics Institute)
Date	2026
Degree name	Candidate
Scientific Supervisor	Anahit Balabekyan
Research Topic	Study of Nuclear Reaction Mechanisms in Heavy Nuclei under High-Energy Light Particle Irradiation

Language skills

English Русский

Work experience

Institution	Yerevan State University
Period of time	2022 till now
Rank/degree	Research Scientist

Institution	Data Foundry AI
Period of time	2019 - 2024

Rank/degree	Research Scientist / ML Specialist

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

Institution	Yerevan State University
Period of time	2015 - 2022
Rank/degree	Junior Researcher

Institution	Yerevan State University
Period of time	2013 - 2015
Rank/degree	Senior Laboratory Assistant

Scientific interests

- Nuclear physics
- Nuclear reactions

Participation in international conferences and seminars

17/11/2023 - 22/11/2023	Pan-Armenian Scientific Conference 2023 Yerevan Armenia
10/07/2022 - 17/07/2022	XVIII International Conference on Symmetry Methods in Physics (SYMPHYS) Yerevan Armenia
17/06/2019 - 21/06/2019	International Conference on Nuclear and Radiation Physics and Materials (NRPM 2019) Yerevan Armenia
06/09/2017 - 19/09/2017	CERN–JINR European School of High-Energy Physics Évora Portugal
26/07/2017 - 04/08/2017	International School-Conference “Nuclear Physics and Applications” (NUCPHYS-SC&APPL) Brașov Romania

10/07/2017 - 15/07/2017	XVII International Conference “Symmetry Methods in Physics” (SYMPHYS) Yerevan Armenia
13/07/2015 - 18/07/2015	IX International Symposium on Quantum Theory and Symmetries (QTS-9) Yerevan Armenia
28/07/2025 - 01/08/2025	XIII International Symposium on Quantum Theory and Symmetries (QTS-13) Yerevan Armenia
02/06/2025 - 13/06/2025	IAEA INPRO School on Strategic Planning for Sustainable Nuclear Energy Paks Hungary
27/02/2017 - 03/03/2017	IAEA Training Course on Nuclear Material Accounting Yerevan Armenia

State awards and honorary titles

2017 Educational Award of the President of the Republic of Armenia in the IT Sector, “Best PhD Student” category

Other information

Scientific collaboration with international partner universities. Participation in international conferences, scientific schools, and seminars. Research and educational activities in nuclear physics, radiation and measurements, nuclear technologies, and small modular reactors (SMRs). Engagement in science communication and STEM education for young people.

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

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

Comparative Analysis of Theoretical and Experimental Interaction Cross-Sections of Deuteron and Enriched Lead 204Pb, 206Pb, 207Pb, and 208Pb

S. Gaginyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 pp. 112–116

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 ՀԱՁՎԱԳՅՈՒՏ 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

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
2019 53
https://nrpm.yerphi.am/

Conference
Reaction rates determination for activation detectors in neutron spectrum generated by 70 MeV electrons
Zeman, M., Holomb, R., Katovsky, K., Kral, 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

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
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
