

# Hasmik A. Shahinyan

✉ hasmik.shahinyan@ysu.am

R<sup>6</sup> 

## Institute of Physics

Chair of Radiophysics and Telecommunications

Associate professor

## Education

---

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Radiophysics
<b>Date</b>	2009 - 2015
<b>Degree name</b>	PhD student

---

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Radiophysics
<b>Date</b>	2007 - 2009
<b>Degree name</b>	Masters

---

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Radiophysics
<b>Date</b>	2003 - 2007
<b>Degree name</b>	Bachelor

---

## Scientific Rank/degree

---

<b>Institution</b>	Yerevan State University
<b>Date</b>	2022
<b>Degree name</b>	Associate professor
<b>Specialty</b>	Physico-mathematical sciences

---

<b>Institution</b>	Yerevan State University
<b>Date</b>	2016
<b>Degree name</b>	Candidate
<b>Specialty</b>	Physico-mathematical sciences
<b>Scientific Supervisor</b>	Yuri L. Vartanyan
<b>Research Topic</b>	PRESENCE OF STRANGE QUARK MATTER IN SUPERDENSE CELESTIAL OBJECTS

---

## Language skills

---

Հայերեն Русский English

---

## Scientific interests

---

- Physics of superdense quark stars. Quantum physics.
- 

## Publications

---

Article

### **Maximal mass strange quark stars based on the modified MIT model with variable vacuum pressure**

Hasmik Shahinyan, Tigran Sargsyan, Arsen Babajanyan

Nuclear Physics B 2026 117277

---

Article

### **Pulsars with the masses $2.14M_{\odot}$ and $2.27M_{\odot}$ as strange star candidates**

Hasmik Shahinyan, Tigran Sargsyan, Arsen Babajanyan

Journal of High Energy Astrophysics 2024 126-131

---

Article

### **Numerical Solutions of Certain Time-Independent Quantum Mechanics Problems by Using the Python Environment**

H. Shahinyan, L. Ghazaryan, A. Babajanyan

Armenian Journal of Physics 2024 43-51

---

Article

### **Microparticles in One-Dimensional, Two-Dimensional and Three-Dimensional Rectangular Potential Holes**

H.A. Shahinyan, L.S. Ghazaryan, N.J. Grigoryan

Armenian Journal of Physics 2023 20-28

---

Article

### **CARDIAC CORRELATES OF NEURODEGENERATIVE CHANGES IN RATS IN THE FORMATION OF PARKINSON'S AND ALZHEIMER'S DISEASES**

Shahinyan H.A., Sarkissian J.S., Sargsyan R.Sh, Poghosayn M.V, Sargsyan V.R.

ՀՀ ԳԱԱ էլեկտրոնային ամսագիր, բնական գիտություններ 2023 22-26

---

Article

### **Solvent Effects on Spin-Spin Coupling Constants in Organomercury Compounds**

A.A. SHAHKHATUNI, A.S. MOVSISYAN, A.A.SHAHINYAN, A.G. SHAHKHATUNI

Journal of Contemporary Physics (Armenian Academy of Sciences) 2021 69-72

---

Manual

### **Ատոմային և միջուկային ֆիզիկայի ընդհանուր դասընթացի լաբորատոր աշխատանքների ուղեցույց**

Հասմիկ Շահինյան, Լուսինե Ղազարյան, Արսեն Բաբաջանյան

2021 64

---

Article

### **STRANGE STARS AT VACUUM PRESSURE DEPENDENT ON QUARK DENSITY**

Yu.L.VARTANYAN, A.K.GRIGORYAN, H.A.SHAHINYAN

ԵՊՀ Գիտական տեղեկագիր, Բնական գիտություններ 2017 71-76

<http://ysu.am/science/hy/1355990920>

---

*Article*

**MASS DEFECT OF STRANGE STARS**

H.A.Shahinyan

Proceedings of the YSU A. Physical and Mathematical Sciences 2015 p. 57-61

<http://www.ysu.am/science/en/journals>

---

*Conference*

**Mass-radius relation of white and strange stars**

VARTANYAN Yury, HAJYAN Gevorg, GRIGORYAN Alexander, ALAVERDYAN Ani, SHAHINYAN Hasmik

---

*Conference*

**Pulsars with more exactly measured masses as possible candidates of strange stars**

VARTANYAN Yuri, GRIGORYAN Alexander, SHAHINYAN Hasmik

---

*Conference*

**Strange quark matter in compact stars**

Yu.L.Vartanyan, G.S.Hajyan, G.B.Alaverdyan, A.K.Grigoryan, A.R.Harutyunyan, A.G.Alaverdyan,

H.A.Shahinyan

---

*Conference*

**The impact of non-zero quark masses on the Equation of State and the Maximum Mass of Strange Quark Stars**

Hasmik Shahinyan, Tigran Sargsyan, Arsen Babajanyan

---