

# Mekhak Vazgen Hayrapetyan

✉ [mhayrapetyan@ysu.am](mailto:mhayrapetyan@ysu.am)

## Institute of Physics

Chair of General Physics and Astrophysics named after Academician Victor Hambardzumyan  
Associate professor

## Education

<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Physics, Chair of General Physics
<b>Date</b>	1988 - 1993
<b>Degree name</b>	Qualified specialist

## Scientific Rank/degree

<b>Institution</b>	Yerevan State University
<b>Date</b>	2004
<b>Degree name</b>	Candidate
<b>Specialty</b>	Physico-mathematical sciences
<b>Scientific Supervisor</b>	David Sedrakian
<b>Research Topic</b>	Pulsars' angular velocity glitches and their relaxation

## Language skills

Հայերեն Русский English

## Work experience

<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2011 till now
<b>Rank/degree</b>	docent

<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2001 till now
<b>Rank/degree</b>	senior researcher

## Scientific interests

- Physics of compact stars and gravitational radiation, superfluidity and superconductivity

*Article*

**Electrical conductivity of a warm neutron star crust in magnetic fields: Neutron-drip regime**

Arus Harutyunyan, Armen Sedrakian, Narine T. Gevorgyan, Mekhak V. Hayrapetyan

Physical Review C 2024 055804

---

*Manual*

**Լաբորատոր պարապմունքների ուղեցույց: Մոլեկուլային ֆիզիկա**

Ա. Ժ. Մուրադյան, Դ. Հ. Բադալյան, Ռ. Յ. Գաբրիելյան, Մ. Վ. Հայրապետյան, Լ. Ա. Հովհաննիսյան

2019 60

---

*Article*

**Генерация магнитного поля в гибридных звездах**

М.В.Айрапетян, Д.М.Седракян, Д.Багдасарян

Астрофизика (Astrophysics) 2018 131-140

<http://www.flib.sci.am/eng/Astrophysics/Frame.html>

---

*Article*

**Магнитное поле нейтронной звезды с кварковым ядром**

М.В.Айрапетян, Д.М.Седракян

Астрофизика (Astrophysics) 2018 573-584

---

*Manual*

**Լաբորատոր պարապմունքների ուղեցույց: Մեխանիկա**

Մ.Հայրապետյան, Մ.Աբրահամյան, Ռ.Գաբրիելյան, Գ.Մուրադյան, Մ.Հարությունյան, Հ.Ենոքյան

2018 150

---

*Article*

**О гравитационном излучении компактных звезд**

М.В.Айрапетян, Д.С.Багдасарян

Astrophysics 2016 93-102

<http://www.springer.com/astronomy/journal/10511>

---

*Article*

**. Magnetic field of strange stars with rotating superfluid core**

D.M.Sedrakian, M.V.Hayrapetyan, D.S.Baghdasaryan

Proceedings of Science 2016 017

<http://pos.sissa.it/POSwhat.html>

---

*Article*

**MAGNETIC FIELD OF STRANGE STARS**

D.M.Sedrakian, M.V.Hayrapetyan, D.S.Baghdasaryan

Proceedings of the YSU. Physical and Mathematical Sciences 2016 47-51

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

---

*Article*

**GENERATION AND DISTRIBUTION OF A MAGNETIC FIELD IN SUPERCONDUCTING STRANGE STARS**

D.M.Sedrakian, M.V.Hayrapetyan, D.S.Baghdasaryan

Astrophysics 2015 536-549

<http://www.springer.com/astronomy/journal/10511>

---

*Article*

**STRANGE QUARK STARS WITH A ROTATING SUPERFLUID CORE**

D.M.Sedrakian, M.V.Hayrapetyan, D.S.Baghdasaryan

Astrophysics 2015 216-232

<http://www.springer.com/astronomy/journal/10511>

---

*Article*

**MECHANISM FOR RADIO EMISSION OF PULSARS**

D.M.Sedrakian, M.V.Hayrapetyan

Astrophysics 2015 131-156

<http://www.springer.com/astronomy/journal/10511>

---

*Article*

**ABSORPTION OF MAGNETOSONIC WAVES IN THE CRUST OF NEUTRON STARS. RADIO EMISSION FROM PULSARS**

D. M. Sedrakian, A. S. Harutyunyan, M. V. Hayrapetyan

Астрофизика (Astrophysics) 2014 530-549

---

*Article*

**MAGNETOHYDRODYNAMIC EQUATIONS FOR THE CRUST OF NEUTRON STARS**

D. M. Sedrakian, A. S. Harutyunyan, M. V. Hayrapetyan

Астрофизика (Astrophysics) 2013 76-87

---

*Article*

**Magnetosonic waves in the crust of a neutron star**

D. M. Sedrakian, A. S. Harutyunyan, M. V. Hayrapetyan

Астрофизика (Astrophysics) 2013 229-245

---

*Conference*

**Magnetic field of strange stars with rotating superfluid core**

D.M.Sedrakian, M.V.Hayrapetyan, D.S.Baghdasaryan

---

*Conference*

**Magnetosonic waves in the crust of a neutron star**

D. M. Sedrakian, A. S. Harutyunyan, M. V. Hayrapetyan

---