

# Roland Mamikoni Avagyan

☎ 23-44  
(060) 71-03-44

✉ rolavag@ysu.am

## Institute of Physics

Chair of Theoretical Physics named after Academician Gurgen Sahakyan  
Professor

## Education

Institution	Yerevan State University
Faculty	Chair of Theoretical Physics
Date	1962 - 1968
Degree name	Qualified specialist

## Scientific Rank/degree

Institution	Yerevan State University
Date	1990
Degree name	Professor
Specialty	Physico-mathematical sciences

## Work experience

Institution	Yerevan State University
Period of time	1967 till now
Rank/degree	professor

## Scientific interests

- Quantum mechanics, Classic mechanics
- cosmology

## Publications

Manual

**Տեսական մեխանիկայի խնդիրների ժողովածու**  
Ռոլանդ Ավագյան, Արամ Սահարյան, Տիգրան Պետրոսյան  
2024 244

Article

**Motion of a Particle in the Field of an Infinite Flat Slab**  
R.M. Avagyan, A.A. Saharian, S.S. Jibilyan  
Astrophysics 2023 411-422

Article

**Cosmological Evolution With Negative Energy Densities**

A.A. SAHARIAN, R.M. AVAGYAN, E.R. BEZERRA DE MELLO, V.KH. KOTANJYAN, T.A. PETROSYAN,

H.G. BABUJYAN

Astrophysics 2022 427-440

---

Article

**Dynamics of a cosmological model with a conformally-coupled scalar field**

R. M. Avagyan, G. H. Harutyunyan, A. S. Kotanjyan, A. V. Hovsepyan, A. A. Saharian

Astrophysics 2021 355-369

---

Article

**ОБ УСКОРЕННОМ РАСШИРЕНИИ РАННЕЙ И ПОЗДНЕЙ ВСЕЛЕННОЙ В РАМКАХ СКАЛЯРНО-ТЕНЗОРНОЙ ТЕОРИИ ТЯГОТЕНИЯ. II**

Р.М.Авакян, Г.Г.Арутюнян

Астрофизика (Astrophysics) 2018 141-152

[http://www.flib.sci.am/eng/Astrophysics/V61Iss1\\_2018.html](http://www.flib.sci.am/eng/Astrophysics/V61Iss1_2018.html)

---

Article

**Qualitative Analysis of Cosmological Models in  $f(R)$ -Gravity**

R. M. Avagyan, E. V. Chubaryan, G. H. Harutyunyan, A. A. Saharian

Communications of the Byurakan Astrophysical Observatory 2018 291-302

---

Article

**Dynamics of the Quasi-de Sitter Model of the Early Universe**

A.S. Kotanjyan, R.M. Avagyan, G.H. Harutyunyan, N.A. Saharyan

Physics of Atomic Nuclei 2018 894-898

---

Article

**Об ускоренном расширении ранней и поздней Вселенной в рамках скалярно-тензорной теории тяготения.**

Г.Г.Арутюнян, Р.М.Авакян, С.В.Сушков

Астрофизика (Astrophysics) 2017 159-168

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

---

Article

**Conformal Representations of the General Scalar-Tensor Theory and Cosmological Models**

E. V. Chubaryan, R. M. Avagyan, G. H. Harutyunyan, A. V. Hovsepyan, A. S. Kotanjyan

Gravitation & Cosmology 2016 193-198

<http://pleiades.online/en/journal/gravcos>

---

Article

**Qualitative evolution in  $f(R)$  cosmologies**

R.M. Avagyan, E.V.Chubaryan, G.H. Harutyunyan, A.A.Saharian

General Relativity and Gravitation 2016 1-21

<http://link.springer.com/journal/10714>

---

Article

**Representation of the evolution of the Universe in the JBD theory considering vacuum phenomena**

G.H. Harutyunyan, R.M. Avagyan, A.S. Kotanjyan, A.V. Hovsepyan

Proceedings of Science 2016 019/1-8

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

---

*Article*

**On a possible inflationary model of the early Universe**

R.M. Avagyan, G.H.Harutyunyan, S.V. Sushkov

Proceedings of the YSU. Physical and Mathematical Sciences 2016 11-14

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

---

*Article*

**SOME PROPERTIES OF STATIONARY GRAVITATIONAL FIELDS**

R.M. Avagyan, G.H.Harutyunyan, S.V. Sushkov

Astrophysics 2015 397-405

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

---

*Conference*

**Late stage of the Universe evolution taking into account the vacuum effects**

KOTANJYAN Anna, Prof. AVAGYAN Roland, Prof. HARUTYUNYAN Gohar, Prof. SUSHKOV Sergey,

Prof. CHUBARYAN Edvard

---

*Conference*

**Nucleation in pressure chamber as a result of a direct graphite-to-diamond transition. Stochastic approximation**

G.H. Harutyunyan, R.M. Avagyan, A.N.Avagyan, A.V. Hovsepyan, M.S. Sakanyan

---

*Conference*

**Об одном сценарии расширения ранней Вселенной**

Р.М. Авагян, Н.А. Саарян, Г.Г. Арутюнян, А.С. Котанджян

---