

## Laboratory of Theoretical Physics

The Research Group in theoretical physics at the Chair of the Theoretical Physics of the Faculty of Physics of Yerevan State University was formed in 1981 by Honored Scientist, Academician Gurgen Sahakyan. Up to 2000 the group was headed by Gurgen Sahakyan. Since 2005 the group was renamed as «Research Laboratory at the Chair of Theoretical Physics». The head of the Laboratory is Academician of NAS RA, Doctor of Sciences, Honored Head of the Chair of Theoretical Physics, Professor Edvard Chubaryan.

The research groups were established in the Laboratory carry out research in the following areas:

### Group of Relativistic Gravity and Cosmology

E.V. Chubaryan, R.M. Avagyan, G.H. Harutyunyan, A.A. Saharian, A.S. Kotanjyan, masters H. Sargsyan, D. Simonyan

- Relativistic Theories of Gravity and Their Astrophysical and Cosmological Applications

- Quantum Vacuum Effects in External Fields (gravitational, electromagnetic) and Their Applications in Cosmology

### Group of Mathematical Physics:

A.P. Nersessian, T.S. Hakobyan, V.R. Ohanyan, G.A. Sarkissian [<http://theorphyslab.yasu.am>]

- Integrable Systems of Classical and Quantum Mechanics, Integrable Spin Systems
- Two-Dimensional Field Theories and String Theories

The Laboratory members collaborate with the following Institutions:

- Joint Institute for Nuclear Research (Dubna, Russia)
- Tomsk University (Russia)
- Kazan Federal University (Russia)
- National Laboratory of Frascati (Italy)
- International Centre for Theoretical Physics (Trieste, Italy)

- Space Research Institute (Spain)
- Federal University of Paraiba (Brazil)
- Heidelberg Max Planck Institute for Nuclear Physics (Germany)
- Leibnitz University of Hannover (Germany)
- Gottingen University (Germany)
- Javakhishvili Tbilisi State University (Georgia)
- University of Roma Tor Vergata (Italy)
- Hebrew University of Jerusalem (Israel)