

Revaz Shanidze

Associate professor, Ivane Javakhishvili Tbilisi State University,
leading researcher at High Energy Physics Institute

Date of Birth: 17 September, 1957
Place of Birth: Tbilisi, Georgia
Marital Status: Married, 2 children
Address: Chavchavadze Av. 16, app. 36
179 Tbilisi, georgia

e-mail: revaz.shanidze@tsu.ge
web-page: training.hepi.edu.ge/Shanidze
phone (mob.): +599 591 9143 31
Languages: Georgian, English, Russian, German



Membership in academic and scientific organizations

- Academic Council of the Ivane Javakhishvili Tbilisi State University
- Scientific Council of High Energy Physics Institute, Tbilisi State University
- Commission for Nuclear Energy and Radiation Protection Problems of the Georgian National Academy of Sciences (GNAS)
- Institute Board of the international KM3NeT Collaboration
- German Physical Society (DPG)

Education and degrees

1964-1964 Secondary school N 24, Tbilisi, Georgia
1974-1979 Tbilisi State University, Physics Department
Tbilisi, Georgia
1990 Candidate of Phys.-Math. Sciences, Tbilisi State University
2006 Doctor of Phys.-Math. Sciences, Tbilisi State University

Working experience

From 2016 Ivane Javakhishvili State University
Faculty of exact and natural sciences, physics department
Associate professor

From 2016 High Energy Physics Institute, Tbilisi State University
Leading scientific researcher

2014-2015 IOM TRQN program (Temporary return of qualified nationals)
Tbilisi State University, guest lecturer

2012-2014 National research center in accelerator, particle and astroparticle physics
(DESY, Zeuthen, Germany), scientific-researcher

2000-2012 University of Erlangen-Nuremberg

1999-2000	(Erlangen, Germany), scientific-researcher High Energy Physics Institute, Tbilisi State University Scientific secretary
1996-1999	National research center in accelerator, particle and astroparticle physics (DESY, Zeuthen, Germany), invited scientist
1994-1996	Joint institute of nuclear research (JINR, Dubna, Russia), senior scientific researcher
1993, 1994	European center for nuclear research (CERN, Geneva, Switzerland), invited scientist
1979-1994	High Energy Physics Institute, Tbilisi State University Last position - senior scientific researcher

Academic experience

At the Faculty of Exact and Natural Sciences of Tbilisi State University, since 2016 I am teaching the following courses: accelerator physics; methods of radiation detection; nuclear physics methods in the medical diagnostics; experimental methods in the particle physics research; introduction in physics-2.

In the University of Erlangen-Nuremberg (2000-2012) my teaching obligations included advanced experimental practicum, seminars and exercises for various courses, supervision of diploma and doctoral students.

I was an advisor for several diploma and doctoral projects in the Tbilisi State University and University of Erlangen-Nuremberg. I was involved in the summer student program of the DESY Zeuthen and was a member of the organizing committee for the annual schools in astroparticle physics of the Erlangen-Nuremberg University.

In the framework of TRQN (Temporary Return of Qualified Nationals) program of the International Organization for Migration (IOM) I have prepared the following lecture courses for Georgian students: particle and astroparticle physics(2014); Python programming for beginners (2015) and introduction to web programming(2015).

Research projects

In the research projects of particle physics I am involved from 1979. Most of these projects were part of the programs of large international scientific collaborations. Here are some examples:

- a) Particle physics experiment BIS-2 at the Serpukhov (Russia) accelerator. The aim of this experiment was the detection and study of new particles, in particular charmed mesons and baryons.
- b) Preparation of the research program for the CMS experiment at the Large hadron Collider of CERN(Geneva, Switzerland).
- c) Preparation of the research program for the future electron-positron collider.
- d) Research in spin structure of nucleon with a help of HERMES experiment at HERA-accelerator in DESY (Hamburg, Germany).

Since 2005 I am involved in astroparticle physics research, including international projects in the high energy neutrino astronomy (ANTARES, KM3NeT and IceCube). I am a co-author of scientific articles, which were recognised as a breakthrough of the year in 2012 (Discovery of the Higgs particle at LHC) and 2013 (Discovery of high energy cosmic neutrinos with IceCube) .

Since 2016 in the Tbilisi State University (High Energy Physics Institute and Physics Department) I am leading an experimental research in lepton physics. Since 2017 I am the leader of a TSU group in the international KM3NeT collaboration.

Publications

I am the author and co-author of more than 200 scientific articles. Large number of these articles

were published in the international peer-reviewed journals, including: Astronomy and Astrophysics, Astroparticle Physics, Astrophysical Journal, European Physical Journal, Nuclear Instruments and Methods in Physics Research, Nuclear Physics, Physical Review, Physical Review Letters, Physics Letters, Science.

196 publications are included in the international database of high energy physics (inspirehep.net). For February 2018 h-index of my publications is 52. Among my papers 6 articles have more than 500 citations.

I was the editor (together with prof. E. Steffens) of the Nato Science Series publication "Spin structure of the nucleon"(Springer, ISBN-10: 1402014414).

International conferences and workshops

I have given talks and presentations at various international conferences and at workshops of the collaborations: BIS-2, CMS, TESLA, HERMES, ANTARES, KM3NeT, IceCube in different countries, including Armenia, Canada, Georgia, Germany, Greece, France, Italy, The Netherlands, Poland, Russia, Spain, Sweden, Switzerland, Unites States of America.

As a member of German Physical Society (DPG, www.dpg-physik.de) I was participating and giving talks at annual Spring Conferences of DPG (2000-2014).

Other activities

Other activities in the fields of science and education include a large number of scientific and popular talks and presentations in Georgian schools and Universities. These activities were reported in the local media (newspaper "Rezonansi", January 13, 2004 and journal"Gza", May 28, 2015).

Revaz Shanidze

February, 2018