

Michael Maziashvili

personal information

Contact Details

Email address: maziashvili@iliauni.edu.ge

Full name: Michael Maziashvili

Gender: Male

Country: საქართველო (Georgia)

Citizenship: საქართველო
(Georgia)

City: Tbilisi

Address: Ilia State University, 3/5 Cholokashvili Ave., Tbilisi 0162, Georgia

Languages

| Language | Writing | Reading | Speaking |
|--------------------|---------|---------|----------|
| German | B1 | B1 | B1 |
| Russian | C1 | C1 | C1 |
| English | C1 | C1 | C1 |
| ქართული (Georgian) | C2 | C2 | C2 |

Education

Academic degree

Academic Degree: Doctoral/PhD, Ed.D or other equivalent

Year obtained: 19.11.2004

Education

| Academic Degree | Name of the Institution | Country | Major discipline | Start year | End year |
|--|-------------------------------|----------------------|------------------|------------|----------|
| Doctoral/PhD, Ed.D or other equivalent | Javakishvili State University | საქართველო (Georgia) | | | |

Projects

Ongoing projects

| Project title | Position | Project head | Start Date | Donor |
|--|------------------|---------------------|------------|--|
| Concepts of modern physics on the example of cosmology and a conceptual teaching of physics at the school. | Head of project. | Michael Maziashvili | 01.10.2023 | Shota Rustaveli National Science Foundation of Georgia |

Completed projects

| Project title | Position | Project head | Start Date | End Date | Donor |
|--|------------------------|---------------------|------------|------------|--|
| Promoting Natural Sciences in Secondary Schools: Explore our Universe. | Head of project. | Michael Maziashvili | 24.09.2022 | 01.03.2023 | Shota Rustaveli National Science Foundation of Georgia |
| Testing Beyond-Standard Model of Cosmology: Fundamental Symmetries and Gravity | Principal Investigator | Michael Maziashvili | 28.02.2020 | 31.10.2023 | Shota Rustaveli National Science Foundation of Georgia |
| National Science Foundation Grant for Fundamental Research | Researcher | Michael Maziashvili | 06.07.2013 | 08.07.2016 | Shota Rustaveli National Science Foundation |

| Project title | Position | Project head | Start Date | End Date | Donor |
|--|------------|---------------------|------------|------------|----------------------|
| DAAD Research Grant | Researcher | Michael Maziashvili | 01.06.2013 | 30.08.2013 | DAAD |
| DAAD Research Grant | Researcher | Michael Maziashvili | 01.06.2013 | 30.08.2013 | DAAD |
| CRDF/GRDF Research fellowship | Researcher | Michael Maziashvili | 04.04.2007 | 09.10.2007 | CRDF/GRDF |
| DAAD Research Grant | Researcher | Michael Maziashvili | 25.07.2006 | 26.10.2006 | DAAD |
| INTAS Fellowship for Young Scientists | Researcher | Michael Maziashvili | 02.06.2006 | 02.06.2007 | INTAS |
| Georgian President Fellowship for Young Scientists | Researcher | Michael Maziashvili | 01.01.2006 | 30.12.2006 | Rustaveli Foundation |

Scientific Fields (2018-2020)

Main Field

Field: 1. Natural sciences

Sub-Field: 1.3 Physical sciences

Subject area: 1.3.3 Particles and fields physics

Scientific Fields (2021-2024)

Main Field

Field: 1. Physical Sciences and Engineering

Sub-Field: 1.9 Universe Sciences

Subject area: 1.9.9 Cosmology and large-scale structure, dark matter, dark energy

Additional Field (1)

Field: 1. Physical Sciences and Engineering

Sub-Field: 1.2 Fundamental Constituents of Matter

Subject area: 1.2.2 Phenomenology of fundamental interactions

Employment History

Current place(s) of employment

| Workplace | Name of the work department | Position | Main responsibilities | Start Date |
|-----------------------|---|---------------------|-----------------------|------------|
| Ilia State University | School of Natural Sciences and Medicine | Associate Professor | Teaching and research | 05.05.2008 |

Work experience

| Company/Institution | Name of the department | Position | Main responsibilities | Start Date | End Date |
|--------------------------------------|------------------------------------|------------------------|-----------------------|------------|------------|
| Andronikashvili Institute of Physics | Department of particle physics | Senior researcher | Research | 02.05.2006 | 02.05.2011 |
| High energy physics institute | Laboratory of quantum field theory | Senior researcher | Research | 01.05.2005 | 01.05.2006 |
| Javakishvili State University | Chair of theoretical physics | Assistant at the chair | Teaching and research | 05.05.2001 | 05.05.2005 |

Scientific Productivity

| Type | Authors | Publication title | Source title | Year |
|---------|--|--|--|------|
| Article | Michael Maziashvili and Vakhtang Tsintsabadze | Avoiding parameter fine-tuning in mass varying neutrino models of DE? | Astroparticle Physics | 2024 |
| Article | Michael Maziashvili | Saving CNB assisted EDE model at the expense of quantum corrections? | Journal of Cosmology and Astroparticle Physics | 2023 |
| Article | Michael Maziashvili | Inflaton-driven early dark energy | Astroparticle Physics, 145, 102792 | 2023 |
| Article | Zurab Kepuladze and Michael Maziashvili | New take on the inflationary quintessence | Phys. Rev. D 103, 063540 | 2021 |
| Article | Michael Maziashvili and Zurab K. Silagadze | Non-local imprints of gravity on quantum theory | General Relativity and Gravitation 53 (2021) 7 | 2021 |
| Article | Michael Maziashvili | Mean lifetime of a false vacuum in terms of the Krylov-Fock nonescape probability | Phys. Rev. D 102, 076006 | 2020 |
| Article | Michael Maziashvili | Salecker–Wigner–Karolyhazy Gedankenexperiment in light of the self-gravity | General Relativity and Gravitation: volume 52, Article number: 70 (2020) | 2020 |
| Article | Michael Maziashvili | Macroscopic detection of deformed QM by the harmonic oscillator | Annals of Physics | 2017 |
| Article | Michael Maziashvili | Light incoherence due to background space fluctuations | PHYSICAL REVIEW D | 2016 |
| Article | Alain Dirkes , Michael Maziashvili and Zurab Silagadze | Black hole remnants due to Planck-length deformed QFT | International Journal of Modern Physics D | 2015 |
| Article | Michael Maziashvili | Extra-dimensional generalization of minimum-length deformed QM/QFT and some of its phenomenological consequences | PHYSICAL REVIEW D | 2015 |
| Article | Michael Maziashvili | Implications of minimum-length deformed quantum mechanics for QFT/QG | Fortschritte der Physik | 2013 |
| Article | Michael Maziashvili | Hilbert space representation of higher-dimensional minimum-length deformed uncertainty relation and some of its implications for ADD model | Journal of Cosmology and Astroparticle Physics | 2013 |
| Article | Michael Maziashvili and Luka Megrelidze | Minimum-length deformed quantum mechanics/quantum field theory, issues, and problems | Progress of Theoretical and Experimental Physics | 2013 |
| Article | Michael Maziashvili | Minimum-length deformed quantization of a free field on de Sitter background and corrections to the inflaton perturbations | PHYSICAL REVIEW D | 2012 |
| Article | Michael Maziashvili | Field propagation in a stochastic background space: The rate of light incoherence in stellar interferometry | PHYSICAL REVIEW D | 2012 |
| Article | Data Mania and Michael Maziashvili | Corrections to the black body radiation due to minimum-length deformed quantum mechanics | Physics Letters B | 2011 |
| Article | Micheal S. Berger and Michael Maziashvili | Free particle wavefunction in light of the minimum-length deformed quantum mechanics and some of its phenomenological implications | PHYSICAL REVIEW D | 2011 |
| Article | Michael Maziashvili and Zurab Silagadze | Quantum-gravitational corrections to the hydrogen atom and harmonic oscillator | International Journal of Modern Physics D | 2010 |
| Article | Michael Maziashvili | Random versus holographic fluctuations of the background metric. II. Note on the dark energies arising due to microstructure of space-time | Europhysics Letters | 2010 |
| Article | Michael Maziashvili | Random versus holographic fluctuations of the background metric. I. (Cosmological) running of space-time dimension | Physics Letters B | 2009 |
| Article | Michael Maziashvili | Light incoherence due to quantum-gravitational fluctuations of the background space | Astroparticle Physics | 2009 |
| Article | Michael Maziashvili | Quantum-gravitational running/reduction of space-time dimension | International Journal of Modern Physics D | 2009 |
| Article | Michael Maziashvili | Operational definition of (brane induced) space-time and constraints on the fundamental parameters | Physics Letters B | 2008 |
| Article | Michael Maziashvili | Space-time uncertainty relation and operational definition of dimension | International Journal of Modern Physics A | 2008 |
| Article | Michael Maziashvili | Dark energy due to effective quantum field theory | Physics Letters B | 2008 |
| Article | Michael Maziashvili | Space-time in light of Karolyhazy uncertainty relation | International Journal of Modern Physics D | 2007 |
| Article | Michael Maziashvili | Cosmological implications of Karolyhazy uncertainty relation | Physics Letters B | 2007 |
| Article | Michael Maziashvili | Black hole remnants due to GUP or quantum gravity? | Physics Letters B | 2006 |

| Type | Authors | Publication title | Source title | Year |
|---------|---|---|--|------|
| Article | Michael Maziashvili | Particle escape into extra space | Physics Letters B | 2006 |
| Article | Merab Gogberashvili and Michael Maziashvili | Dark matter in the framework of shell - universe | General Relativity and Gravitation | 2005 |
| Article | Michael Maziashvili | Modified Friedman scenario from the Wheeler-Dewitt equation | PHYSICAL REVIEW D | 2005 |
| Article | Michael Maziashvili | Dynamics of massive matter disappearance on the brane | Physics Letters B | 2005 |
| Article | Michael Maziashvili | Particle production by the thick walled bubble | Modern Physics Letters A | 2004 |
| Article | Michael Maziashvili | Particle production by the expanding thin walled bubble | Modern Physics Letters A | 2004 |
| Article | Michael Maziashvili | Brane solution with an increasing warp factor | Physics Letters B | 2004 |
| Article | Michael Maziashvili | Matching of false vacuum instanton with the Coleman-de Luccia bounce | PHYSICAL REVIEW D | 2004 |
| Article | Michael Maziashvili | Uniqueness of a negative mode about a bounce solution | Journal of Physics A: Mathematical and General | 2003 |
| Article | Michael Maziashvili | Particle production related to the tunneling in false vacuum decay | Modern Physics Letters A | 2003 |
| Article | Michael Maziashvili | Proper fluctuations associated with quantum tunneling in field theory | Modern Physics Letters A | 2003 |
| Article | Michael Maziashvili | On the gauge fixing condition in false vacuum decay with gravity | Bulletin of the Georgian Academy of Sciences | 2002 |

Scholarships and awards

| Scholarships/awards name | Issuer | Year of Issue |
|--|---|---------------|
| DAAD Research Grant | DAAD | 2013 |
| National Science Foundation Grant for Fundamental Research | Shota Rustaveli National Science Foundation | 2013 |
| CRDF/GRDF Research fellowship | CRDF/GRDF | 2007 |
| INTAS Fellowship for Young Scientists | INTAS and GNSF | 2006 |
| Georgian President Fellowship for Young Scientists | GNSF | 2006 |
| DAAD Research Grant | DAAD | 2006 |

Participation in scientific events

| Scientific event name | Title of the presentation | Event venue | Year |
|---|---|-------------------------------------|------|
| International Conference on Neutrinos and Dark Matter (NuDM-2022) | Dark energy in mass varying neutrino models | Online talk, Sharm El-Sheikh, Egypt | 2022 |
| Recent Advances in Fundamental Physics | CNB assisted dark energy | Tbilisi, Georgia | 2022 |
| Seminar at the Department of Particle Physics, Munich University | I don't remember exactly. | Munich, Germany | 2014 |
| Seminars at FIAS - Frankfurt am Main & ASC - München | I don't remember exactly. | Frankfurt am Main/München, Germany | 2013 |
| Karl Schwarzschild Meeting | I don't remember exactly. | Frankfurt am Main, Germany | 2013 |
| International Conference "Physics at the future colliders" | I don't remember exactly. | Tbilisi, Georgia | 2009 |
| Seminar at the Service de Physique Theorique, Universite Libre de Bruxelles | I don't remember exactly. | Brussels, Belgium | 2007 |
| Seminar at International Centre for Theoretical Physics | I don't remember exactly. | Trieste, Italy | 2007 |
| GRECO seminar at the Institut d'Astrophysique de Paris | I don't remember exactly. | Paris, France | 2006 |
| Seminar at the Department of Cosmology and Astroparticle Physics, Munich University | I don't remember exactly. | Munich, Germany | 2006 |
| Planck 05 | None | Trieste, Italy | 2005 |
| Conference on Computational Cosmology | I don't remember exactly. | Trieste, Italy | 2005 |
| 10th Gran Sasso Summer Institute | Do not remember exactly. | Assergi, Italy | 2005 |
| Neutrino International Conference in Armenia | I don't remember exactly. | Yerevan, Armenia | 2005 |
| Conference on the Fundamental Symmetries and Fundamental Constants | None | Trieste, Italy | 2004 |

Productivity index

| # | Citation index | h-index |
|----------------|----------------|---------|
| Google scholar | 527.00 | 10.00 |

