Nino Chkheidze

Personal information

Contact Details

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nino.chkheidze@iliauni.edu.ge

Full name: Nino Chkheidze

Gender: Female

Country: საქართველო (Georgia)

Citizenship: საქართველო (Georgia)

City: Georgia

Language	Writing	Reading	Speaking
ქართული (Georgian)	C2	C2	C2
English	C1	C1	C1
German	B2	C1	C1
Russian	C1	C2	C2

Education

Academic degree

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

Year obtained: 16.05.2011

Education

Academic Degree	Name of the Institution	Country	Major discipline	Start year	End year
Doctoral/PhD, Ed.D or other equivalent	Ilia State University	საქართველო (Georgia)	Physics	2009	2011
Master/MS, MA, MR, MBA, m.Ed or other equivalent	Ivane Javakhishvili Tbilisi State University	საქართველო (Georgia)	Theoretical Physics	2007	2009
Bachelor/BS, BA, BE or other equivalent	Ivane Javakhishvili Tbilisi State University	საქართველო (Georgia)	Physics	2002	2006

Projects

Completed projects

Project title	Position	Project head	Start Date	End Date	Donor
The different observational manifestations of radio pulsars and their single emission nature.	key personnel (Researcher- Project Manager)	George Machabeli	25.02.2019	25.02.2022	Shota Rustaveli National Science Foundation of Georgia
On the nature of Intermittent emission from radio pulsars	Principle Investigator	Nino Chkheidze	10.12.2018	10.12.2020	Shota Rustaveli National Foudation of Georgia

Project title	Position	Project head	Start Date	End Date	Donor
Cosmic rays powered by Astrophysical compact objects	Principle Investigator	Nino Chkheidze	20.12.2017	20.12.2020	Shota Rustaveli National Foudation of Georgia
Modern observations of extraordinary pulsars and their theoretical interpretation	Principle Investigator	Nino Chkheidze	17.12.2015	17.12.2017	Shota Rustaveli National Science Foundation of Georgia
Nonlinear optical phenomena in Astrophysical sources	key personnel (Researcher-Project Manager)	George Machabeli	05.05.2015	05.05.2018	Shota Rustaveli National Science Foundation of Georgia
The VHE pulse emission from pulsars.	Principle Investigator	Nino Chkheidze	01.04.2014	30.09.2014	Shota Rustaveli National Science Foundation of Georgia
The novel plasma acceleration mechanism of particles in cosmic sources	Principle Investigator	Nino Chkheidze	24.12.2013	24.12.2014	Shota Rustaveli National Science Foundation of Georgia
X-ray properties of Isolated Neutron Stars	Principle Investigator	Nino Chkheidze	01.05.2013	31.07.2013	Shota Rustaveli National Science Foundation of Georgia
Cosmic Ultra-High-Energies and their Realization Mechanisms	Principle Investigator	Nino Chkheidze	15.04.2013	15.04.2016	Shota Rustaveli National Science Foundation of Georgia
The Synchrotron Emission Model of Pulsar HE Radiation	Principle Investigator	Nino Chkheidze	12.11.2012	12.11.2013	Shota Rustaveli National Science Foundation of Georgia
Electrodynamics of Relativistic Plasma Flows Emanating from Rotating Compact Astrophysical Objects Pulsars to Active Galactic Nuclei	Researcher	George Machabeli	03.09.2007	03.09.2009	Georgian National scientific foundation

Scientific Fields (2018-2020)

Main Field

Field: 1. Natural sciences

Sub-Field: 1.3 Physical sciences

Subject area: 1.3.8 Astronomy (including astrophysics, space science)

Scientific Fields (2021-2024)

Main Field

Field: 1. Physical Sciences and Engineering

Sub-Field: 1.9 Universe Sciences

Subject area: 1.9.10 Relativistic astrophysics and compact objects

Employment History

Current place(s) of employment

Workplace	Name of the work department	Position	Main responsibilities	Start Date
Ilia State University	School of Natural Science and Medicine	Associate Professor inTheoretical Astrophysics	Research, teaching	01.08.2022

Work experience

Company/Institution	Name of the department	Position	Main responsibilities	Start Date	End Date
Ilia State University	School of Natural Sciences and Medicine	Assistant professor in theoretical astrophysics	Research, teaching	12.07.2017	31.07.2022
Ilia State University	Institute of Theoretical Physics / Centre for Theoretical Astrophysics	Researcher	Research	07.07.2010	01.08.2022
Ilia State University	Institute of Theoretical Physics	Assistant researcher	Research	01.07.2009	06.07.2010

Scientific Productivity

Article / Monograph / Manual

Type	Authors	Publication title	Source title	Year
Article	Chkheidze Nino	On the VHE spectrum and formation of the Teraelectronvolt pulsed emission of the Crab Pulsar	galaxies - Special Issue "Observations of Gamma-Ray Pulsars"	2022
Article	Chkheidze, N., Machabeli, G., Kevlishvili, N.	The curvature emission model of peculiar isolated neutron star 2XMM J104608.7-594306	New Astronomy	2021
Article	Osmanov, Zaza ; Machabeli, George ; Chkheidze, Nino	A Novel Mechanism of Pair Creation in Pulsar Magnetospheres	Universe	2021
Article	Machabeli, George; Chkheidze, Nino; Malov, Igor	Energy accumulation mechanism in pulsar magnetospheric plasma eigen-waves and formation of Giant Radio Pulses	Astrophysics and Space Science	2019
Article	Machabeli, G.; Rogava, A.; Chkheidze, N.; Kevlishvili, N.	The high energy emission of the Crab's twin pulsar PSR J0540-6919 in the Large Magellanic Cloud	Astrophysics and Space Science	2019
Article	Osmanov, Zaza; Mahajan, Swadesh; Machabeli, George; Chkheidze, Nino	Efficiency of centrifugal mechanism in producing PeV neutrinos from active galactic nuclei	Astroparticle Physics	2018
Article	Machabeli, George; Rogava, Andria; Chkheidze, Nino	Emission of extremely bright gamma-ray pulsar in the Large Magellanic Cloud	arxiv.org	2016
Article	Osmanov, Zaza; Mahajan, Swadesh; Machabeli, George; Chkheidze, Nino	Millisecond newly born pulsars as efficient accelerators of electrons	Nature Scientific Reports	2015
Article	Chkheidze, N.; Babyk, Iu.	Synchrotron emission model of gamma-ray pulsar PSR J2021+3651	New Astronomy	2015

Type	Authors	Publication title	Source title	Year
Article	Osmanov, Z.; Mahajan, S.; Machabeli, G.; Chkheidze, N.	Extremely efficient Zevatron in rotating AGN magnetospheres	MNRAS	2014
Article	Machabeli, G.; Chkheidze, N.	On high frequency Cherenkov-type radiation in pulsar magnetospheric electron-positron plasma	Ap&SS	2014
Article	Machabeli, G.; Chkheidze, N.	A possible mechanism for forming the radio emission spectrum of the Crab pulsar	MNRAS	2014
Article	Chkheidze, N.	Cosmic Ultra-high energies and their realization mechanisms	ysc.conf.	2014
Article	Chkheidze, N.; Machabeli, G.; Osmanov, Z.	On the Spectrum of the Pulsed Gamma-Ray Emission of the Crab Pulsar from 10 MeV to 400 GeV	ApJ	2013
Article	Chkheidze, N.; Babyk, Iu.	Nonthermal emission model of isolated X-ray pulsar RX J0420.0-5022	AASP	2013
Article	Mahajan, Swadesh; Machabeli, George; Osmanov, Zaza; Chkheidze, Nino	Ultra High Energy Electrons Powered by Pulsar Rotation	Nature Scientific Reports	2013
Article	Osmanov, Z.; Chkheidze, N.	Synchrotron Emission Driven by the Cherenkov-drift Instability in Active Galactic Nuclei	ApJ	2013
Article	Chkheidze, Nino	Synchrotron emission model of RX J1856.5-3754	New Astronomy	2012
Article	Chkheidze, N.; Osmanov, Z.	On the mechanism of the pulsed high-energy emission from the pulsar PSR B1509-58	MNRAS	2012
Article	Chkheidze, N.; Machabeli, G.; Osmanov, Z.	On the Very High Energy Spectrum of the Crab Pulsar	ApJ	2011
Article	Chkheidze, N.	The plasma emission model of RBS1774	A&A	2011
Article	Chkheidze, N.	The emission polarization of RX J1856.5-3754	ApJ	2009
Article	Chkheidze, N.; Lomiashvili, D.	On the recently discovered pulsations from RX J1856.5-3754	New Astronomy	2008
Article	Chkheidze, N.; Machabeli, G.	The plasma emission model of RX J1856.5-3754	A&A	2007

Scholarships and awards

Scholarships/awards name	Issuer	Year of Issue
The Pascal Prize	Ilia State University	2019
The Pascal Prize	Ilia State University	2015
Erasmus MID Scholarship for Postdocs	ERASMUS MID	2014
DAAD Scholarship for Research stays of University Academics and Scientists	DAAD	2012

Participation in scientific events

Scientific event name	Title of the presentation	Event venue	Year
Neutron Stars: A Cosmic Laboratory for Matter under Extreme Conditions	On the high frequency Cherenkov-type radiation from pulsars	Physikzentrum Bad Honnef, Germany	2016
20th Young Scientiests' Conference on Astronomy and Space Physics	Invited Lecturer: "The multiwavelength properties and possible unification of different classes of pulsars"	Astronomy and Space Physics Department, Taras Shevchenko National University of Kyiv, Kiev, Ukraine	2013
19th Young Scientiests' Conference on Astronomy and Space Physics	Invited Lecturer: "Anomalous Pulsars and Magnetars"	Astronomy and Space Physics Department, Taras Shevchenko National University of Kyiv, Kiev, Ukraine	2012
School and Conference on Analytical and Computational Astrophysics	Invited Lecturer: "Anomalous Pulsars and Magnetars – General Properties" and "Anomalous Pulsars and Magnetars – Emission Mechanisms"	The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy	2011
International Workshop on the Frontiers of Modern Plasma Physics	The Plasma Emission Model of RX J1856.5-3754	The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy	2008
School on Astrophysical Fluid Dynamics	The peculiar neutron star RX J1856.5-3754	The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy	2007

Productivity index

#	Citation index	h-index
Google scholar	144.00	7.00
Scopus	99.00	6.00