

# Vasili Kukhianidze

## Personal information

## Contact Details

Email address:

Full name: Vasili Kukhianidze

vasil.kukhianidze@iliauni.edu.ge

Gender: Male

Country: საქართველო (Georgia)

Citizenship: საქართველო  
(Georgia)

City: Tbilisi

## Languages

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

## Education

### Academic degree

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

Year obtained: 19.05.2006

### Education

Academic Degree	Name of the Institution	Country	Major discipline	Start year	End year
Master/MS, MA, MR, MBA, m.Ed or other equivalent	Tbilisi State University	საქართველო (Georgia)	Astronomy	1983	1988
Doctoral/PhD, Ed.D or other equivalent	Abastumany Astrophysical Observatory, Academy of Science	საქართველო (Georgia)	Astronomy		2006

## Projects

### Ongoing projects

Project title	Position	Project head	Start Date	Donor
Plasma jets in the solar atmosphere	Principal Investigator	Vasili Kukhianidze	19.12.2023	Shota Rustaveli National Science Foundation
Short period activity cycles in Sun-like stars	Coordinator	Teimuraz Zaqarashvili	01.03.2022	Shota Rustaveli National Science Foundation

### Completed projects

Project title	Position	Project head	Start Date	End Date	Donor
Our mysterious Sun: magnetic coupling between solar interior and atmosphere	Local Organizing Committee	Teimuraz Zaqarashvili	01.08.2017	01.11.2017	Shota Rustaveli National Science Foundation

Project title	Position	Project head	Start Date	End Date	Donor
Rieger type periodicity in solar activity and the seismology of the solar interior	Coordinator	Teimuraz Zaqarashvili	09.12.2016	09.12.2019	Shota Rustaveli National Science Foundation
Instability of magnetised jets in the solar atmosphere	Principal investigator	Vasil Kukhianidze	01.11.2016	01.11.2019	Shota Rustaveli National Science Foundation
Elaboration of universal test on magneto sensitivity	Team Leader	Ketevan Janashia	01.01.2014	30.06.2016	ISTC
Space weather: modeling of the solar wind and CME propagation	Researcher	Teimuraz Zaqarashvili	01.01.2012	31.12.2014	Shota Rustaveli National Science Foundation
Solar and Space Weather Network of Excellence	Team Leader	Stefaan Poedts	01.01.2011	31.12.2016	FP7
Magnetoseismology of the solar atmosphere	Manager	Teimuraz Zaqarashvili	01.01.2010	31.12.2012	Shota Rustaveli National Science 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: 1.9.1 Solar physics – the Sun and the heliosphere

### Additional Field (1)

Field: 1. Physical Sciences and Engineering

Sub-Field: 1.9 Universe Sciences

Subject area: 1.9.6 Stars – stellar physics, stellar systems

## Employment History

### Current place(s) of employment

Workplace	Name of the work department	Position	Main responsibilities	Start Date
E. Kharadze Georgian National Astrophysical Observatory	Solar and stellar physics group	Senior Scientist	Research	15.12.2020
Ilia State University	Faculty of Natural Sciences and Medicine	Associate professor	Teaching and research	15.04.2010

### Work experience

Company/Institution	Name of the department	Position	Main responsibilities	Start Date	End Date
Ilia State University	Faculty of Natural Sciences and Medicine	Assistant professor	Teaching and Research	15.04.2009	14.04.2010

Company/Institution	Name of the department	Position	Main responsibilities	Start Date	End Date
Abastumany Astrophysical Observatory at Ilia State University	Faculty of Natural Sciences and Medicine	Research associate	Research	12.02.2007	14.04.2009
Abastumani Astrophysical Observatory	Astrophysics	Scientist	Research	21.03.1998	11.02.2007
Abastumani Astrophysical Observatory	Astrophysics	Junior scientist	Research	15.04.1988	20.03.1998

## Scientific Productivity

### Article / Monograph / Manual

Type	Authors	Publication title	Source title	Year
Article	M. Kachakhidze, N. Kachakhidze-Murphy, V. Kukhianidze, G. Ramishvili, B. Khvitia	For the Classification of Anomalous Geophysical Fields that Existed Prior to an Earthquake	Prevention and Treatment of Natural Disasters, Volume 3 Issue 1 (2024)	2024
Article	M. Albekioni, T.V. Zaqarashvili, V. Kukhianidze	Rossby waves on stellar equatorial $\beta$ planes: Uniformly rotating radiative stars	A&A, Vol. 671, A91.	2023
Article	M. Albekioni, T.V. Zaqarashvili, V. Kukhianidze, E. gurgenashvili, Ph. Bourdin	Equatorially trapped Rossby waves in radiative stars	Astronomische Nachrichten, Volume 344, Issue 10, article id. e20230083	2023
Article	Vashalomidze, Z. ; Zaqarashvili, T. V. ; Kukhianidze, V. ; Ramishvili, G. ; Hanslmeier, A. ; Gömöry, P.	Prominence instability and CMEs triggered by massive coronal rain in the solar atmosphere	Astronomy & Astrophysics	2022
Article	Gurgenashvili, E.; Zaqarashvili, T. V. ; Kukhianidze, V. ; Reiners, A. ; Oliver, R. ; Lanza, A. F. ; Reinhold, T.	Rieger-type periodicity in the total irradiance of the Sun as a star during solar cycles 23-24	Astronomy & Astrophysics	2021
Article	Vashalomidze, Z. M.; Zaqarashvili, T. V.; Kukhianidze, V. D.; Ramishvili, G. T.,	Eruption of Prominences Triggered by Coronal Rain in the Solar Atmosphere Observed by SDO/AIA and Stereo/EUVI	Astrophysics	2019
Article	Vashalomidze, Z. M.; Zaqarashvili, T. V.; Kukhianidze, V. D.	Measurement of the Polytropic Index During Solar Coronal Rain Using a Diagram of the Electron Density Distribution as a Function of Electron Temperature	Astrophysics	2019
Article	Kuridze, D.; Mathioudakis, M.; Morgan, H.; Oliver, R.; Kleint, L.; Zaqarashvili, T. V.; Reid, A.; Koza, J.; Löfdahl, M. G.; Hillberg, T.; Kukhianidze, V.; Hanslmeier, A.	Mapping the Magnetic Field of Flare Coronal Loops	The Astrophysical Journal	2019
Article	Mghebrishvili, Irakli; Zaqarashvili, Teimuraz V.; Kukhianidze, Vasil; Kuridze, David; Tsiklauri, David; Shergelashvili, Bidzina M.; Poedts, Stefaan	Association between Tornadoes and Instability of Hosting Prominences	The Astrophysical Journal	2018
Article	Bagashvili, Salome R.; Shergelashvili, Bidzina M.; Japaridze, Darejan R.; Kukhianidze, Vasil; Poedts, Stefaan; Zaqarashvili, Teimuraz V.; Khodachenko, Maxim L.; De Causmaecker, Patrick	Evidence for Precursors of the Coronal Hole Jets in Solar Bright Points	The Astrophysical Journal Letters	2018
Article	Gurgenashvili, Eka; Zaqarashvili, Teimuraz V.; Kukhianidze, Vasil; Oliver, Ramon; Ballester, Jose Luis; Dikpati, Mausumi; McIntosh, Scott W.	North-South Asymmetry in Rieger-type Periodicity during Solar Cycles 19-23	The Astrophysical Journal	2017
Article	Philishvili, E.; Shergelashvili, B. M.; Zaqarashvili, T. V.; Kukhianidze, V.; Ramishvili, G.; Khodachenko, M.; Poedts, S.; De Causmaecker, P.	Quasi-oscillatory dynamics observed in ascending phase of the flare on March 6, 2012	Astronomy & Astrophysics	2017
Article	Dumbadze, G.; Shergelashvili, B. M.; Kukhianidze, V.; Ramishvili, G.; Zaqarashvili, T. V.; Khodachenko, M.; Gurgenashvili, E.; Poedts, S.; De Causmaecker, P.	Long-period oscillations of active region patterns: least-squares mapping on second-order curves	Astronomy & Astrophysics	2017
Article	Bagashvili, S. R.; Shergelashvili, B. M.; Japaridze, D. R.; Chargeishvili, B. B.; Kosovichev, A. G.; Kukhianidze, V.; Ramishvili, G.; Zaqarashvili, T. V.; Poedts, S.; Khodachenko, M. L.; De Causmaecker, P.	Statistical properties of coronal hole rotation rates: Are they linked to the solar interior?	Astronomy & Astrophysics	2017
Article	Gurgenashvili, Eka; Zaqarashvili, Teimuraz V.; Kukhianidze, Vasil; Oliver, Ramon; Ballester, Jose Luis; Ramishvili, Giorgi; Shergelashvili, Bidzina; Hanslmeier, Arnold; Poedts, Stefaan	Rieger-type Periodicity during Solar Cycles 14-24: Estimation of Dynamo Magnetic Field Strength in the Solar Interior	The Astrophysical Journal	2016

Type	Authors	Publication title	Source title	Year
Article	Mghebrishvili, Irakli; Zaqarashvili, Teimuraz V.; Kukhianidze, Vasil; Ramishvili, Giorgi; Shergelashvili, Bidzina; Veronig, Astrid; Poedts, Stefaan	Dynamics of a Solar Prominence Tornado Observed by SDO/AIA on 2012 November 7-8	The Astrophysical Journal	2015
Article	Vashalomidze, Z.; Kukhianidze, V.; Zaqarashvili, T. V.; Oliver, R.; Shergelashvili, B.; Ramishvili, G.; Poedts, S.; De Causmaecker, P.	Formation and evolution of coronal rain observed by SDO/AIA on February 22, 2012	Astronomy & Astrophysics	2015
Article	Gigolashvili, M. S.; Japaridze, D. R.; Kukhianidze, V. J.	Investigation of the Differential Rotation by H $\alpha$ Filaments and Long-Lived Magnetic Features for Solar Activity Cycles 20 and 21	Solar Physics	2013
Article	Zaqarashvili, T. V.; Kukhianidze, V.; Khodachenko, M. L.	Propagation of a sausage soliton in the solar lower atmosphere observed by Hinode/SOT	Monthly Notices of the Royal Astronomical Society: Letters	2010
Article	Japaridze, D. R.; Gigolashvili, M. S.; Kukhianidze, V. J.	Investigation of the Solar Differential Rotation of Compact Magnetic Elements for 1966 - 1986	Solar Physics	2009
Article	Zaqarashvili, T. V.; Khutsishvili, E.; Kukhianidze, V.; Ramishvili, G.	Doppler-shift oscillations in solar spicules	Astronomy and Astrophysics	2007
Article	Gigolashvili, M. Sh.; Kiladze, R. I.; Kukhianidze, V. J.; Ramishvili, G. T.	On the date when Christianity became the state religion of Georgia	Astronomical & Astrophysical Transactions	2007
Article	Japaridze, D. R.; Gigolashvili, M. Sh.; Kukhianidze, V. J.	Investigation of the differential rotation of the large-scale magnetic elements for the solar activity cycles 20 and 21	Advances in Space Research	2007
Article	Gigolashvili, M. S.; Japaridze, D. R.; Mdzinarishvili, T. G.; Chargeishvili, B. B.; Kukhianidze, V. J.	Investigation of the N S asymmetry of the differential rotation of H $\alpha$ filaments and large-scale magnetic elements	Advances in Space Research	2007
Article	Kukhianidze, V.; Zaqarashvili, T. V.; Khutsishvili, E.	Observation of kink waves in solar spicules	Astronomy and Astrophysics	2006
Article	Javakhishvili, G.; Kukhianidze, V.; Todua, M.; Inasaridze, R.	A method of open cluster membership determination	Astronomy and Astrophysics	2006
Article	Gigolashvili, M. Sh.; Japaridze, D. R.; Kukhianidze, V. J.	Variations of the Solar Differential Rotation Associated with Polarity Reversal	Solar Physics	2005
Article	Khutsishvili, E. V.; Zaqarashvili, T. V.; Kukhianidze, V. J.; Gigolashvili, M. Sh.; Ograpishvili, H. B.	Fluctuations in the chromospheric spicules	Abastumanskaia Astrofizicheskaia Observatoriia Biulleten	2004
Article	Kiladze, R. I.; Kukhianidze, V. J.	Two-color photometry of Pluto and a refinement of the position of its pole.	Solar System Research	1995
Article	Kiladze, R. I.; Kukhianidze, V. D.	Photometry of Pluto in two colors	Astronomicheskii Vestnik	1991
Article	Kiladze, R. I.; Kukhianidze, V. J.	Two-Color Photometry of Pluto	Solar System Research	1991

### Scholarships and awards

Scholarships/awards name	Issuer	Year of Issue
Team of the best scientists of the year	Shota Rustaveli National Science Foundation	2017

### Participation in scientific events

Scientific event name	Title of the presentation	Event venue	Year
Asia Oceania Geophysical Society conference	Quasi bi-annual oscillations in the solar activity caused by magnetic Rossby waves	Taipei, Taiwan	2011
Proceedings of the 7th International Workshop on Planetary, Solar and Heliospheric Radio Emissions (PRE VII)	Magnetohydrodynamic Shocks and Solitons in the Solar Atmosphere: Recent Challenges in Observations and Theory	Graz, Austria	2011
Advanced GPS Data Processing Workshop	Advanced GPS Data Processing	Massachusetts Institute of Technology, Boston, USA	2008

Scientific event name	Title of the presentation	Event venue	Year
The Dynamic Sun: Challenges for Theory and Observations	Kink waves in solar spicules: observation and modeling	Leuven, Belgium	2005

### Productivity index

#	Citation index	h-index
Google scholar	713.00	14.00
Scopus	448.00	13.00
Web of science	469.00	13.00