

Curriculum Vitae

Personal information

First name(s) / LAST NAME (S) Alexandru Viorel / POP
Adresa Romanian Academy, Astronomical Observatory Cluj-Napoca, Cireşilor 19,
400487, Cluj-Napoca, Romania
Telefon / Fax 0264592820
E-mail andi_pop@yahoo.com
Nationality Romanian
Date of birth 07.02.1962
Gender Male

Work experience

Dates 01.09.1984 – 30.11.1987
Occupation or position held Physics teacher
Main activities and responsibilities Physics teaching
Name and address of employer Elementary Schools Boju and Cara, Cojocna, Cluj County; Elementary School Apahida, Apahida, Cluj County; Elementary School Dezmir, Apahida, Cluj County;
Type of bussines or sector Education
Dates 01.12.1989 – 31.03.1990
Occupation or position held Physicist
Main activities and responsibilities Astrophysics, Variable Stars
Name and address of employer Central Institute of Physics, Centre of Astronomy and Space Sciences, Astronomical Observatory Cluj-Napoca;
Type of bussines or sector Research
Dates 01.04.1990 – 31.12.1990
Occupation or position held Physicist
Main activities and responsibilities Astrophysics, Variable Stars, Astronomical Time Series Analysis
Name and address of employer Romanian Academy, Astronomical Institute, Astronomical Observatory Cluj-Napoca
Type of bussines or sector Research
Dates 01.01.1991 – 30.04.1996
Occupation or position held Scientific Researcher
Main activities and responsibilities Astrophysics, Variable Stars, Astronomical Time Series Analysis
Name and address of employer Romanian Academy, Astronomical Institute, Astronomical Observatory Cluj-Napoca
Type of bussines or sector Research
Dates 01.05.1996 – 01.08.2000
Occupation or position held Senior Researcher III
Main activities and responsibilities Astrophysics, Variable Stars, Astronomical Time Series Analysis
Name and address of employer Romanian Academy, Astronomical Institute, Astronomical Observatory Cluj-Napoca
Type of bussines or sector Research
Dates 01.08.2000 – 31.05.2014
Occupation or position held Senior Researcher II
Main activities and responsibilities Astrophysics, Variable Stars, Astronomical Time Series Analysis
Name and address of employer Romanian Academy, Astronomical Institute, Astronomical Observatory Cluj-Napoca
Type of bussines or sector Research

Dates 01.06.2014 – Present
Occupation or position held Senior Researcher I
Main activities and responsibilities Astrophysics, Variable Stars, Astronomical Time Series Analysis
Name and address of employer Romanian Academy, Astronomical Institute, Astronomical Observatory Cluj-Napoca
Type of bussines or sector Research

Education and training

Dates 1990 – 1999
Title of qualification awarded Academic title of DOCTOR in the field of Mathematics, specialty Astronomy
Title of PhD Thesis / Supervisor Contributions to the Analysis and Interpretation of Stellar Variability Senior Researcher I Dr. Tiberiu OPROIU
Name and type of organisation providing education and training Romanian Academy, Astronomical Institute, Bucharest

Dates 1980 – 1984
Title of qualification awarded Physics Diploma / profile: Physics, specialty: Physics
Name and type of organisation providing education and training „Babeş-Bolyai” University Cluj-Napoca, Faculty of Physics, Cluj-Napoca, Romania

Dates 1976 – 1980
Title of qualification awarded Baccalaureat diploma / profile Telecommunications / technical qualification: electronics
Principal subjects- occupational skills covered Profile: Telecommunications / Technical qualification: electronics
Name and type of organisation providing education and training Liceul Industrial „George Bariţiu”, Cluj-Napoca, Cluj County

Personal skills and competences

Mother tongue (s) Romanian

Other language (s) English, French

Self-assessment

European level (*)

English

French

Înţelegere		Vorbire		Sciere
Listening	Reading	Spoken interaction	Spoken production	
Upper intermediate	Upper intermediate	Intermediate	Intermediate	Upper intermediate
Intermediate	Upper intermediate	Intermediate	Intermediate	Intermediate

Computer skills and competences

- MS-DOS, Windows
- FORTRAN, BASIC, C programming
- MS Office

Education and research activities

Taught courses „Babeş-Bolyai” University Cluj-Napoca, Faculty of Physics
Optional course: *Astrophysics* (2003 – 2004, Semester II)

Participation to Research Projects / Grants (national or international competitions)

[1] *Application of the nonlinear dynamic systems (and stochastic phenomena) theory in plasma, (molecular clusters), biophysics, astrophysics, engineering* (contract CNCSU nr. 16/1998, CNCSIS nr. 32575/1999, tema 89 cod CNCSIS 306/2000), participant in the team of “Babeş-Bolyai” University Cluj-Napoca, Faculty of Physics.

[2] Contract CNCSIS tema 81, cod CNCSIS 1057/2001; CNCSIS cod 66/2002; CNCSIS cod 149/2003 “*Analysis of some nonlinear phenomena through experimental analytic methods and numerical simulations*”, participant in the team of “Babeş-Bolyai” University Cluj-Napoca, Faculty of Physics.

[3] MEC, PNCDI, AEROSPATIAL/SP3/ Contract 129/2004 “SCANSAT”, 2005-2006, participant, partner Romanian Academy, Cluj-Napoca Branch, Astronomical Observatory Cluj-Napoca.

[4] MEC, ANCS, SECURITATE/SP3/ Contract 22/2005 “DOG”, 2006, participant, partner Romanian Academy, Cluj-Napoca Branch, Astronomical Observatory Cluj-Napoca.

- [5] CNCSIS, Grant Idei, Contract 31796/ 23.11.2007, 2007-2010, „*Theoretic and computational modelling in solar global coronal and stellar seismology: connections global – local waves, magnetic fields – variabilities*”, participant, team of University “Babeş-Bolyai” Cluj-Napoca, Faculty of Physics.
- [6] ANCS, CNMP, PARTENERIATE IN DOMENII PRIORITARE, Proiect 81-004/2007 “URSA”, 2007-2010, participant, partner Romanian Academy, Cluj-Napoca Branch, Astronomical Observatory Cluj-Napoca.
- [7] ANCS, CNMP, PARTENERIATE IN DOMENII PRIORITARE, Proiect 82-093/2008 “LEOSCOPI”, 2008-2011, participant, partner Romanian Academy, Cluj-Napoca Branch, Astronomical Observatory Cluj-Napoca.
- [8] UEFISCDI, PNII-PT-PCCA2, Parteneriate, Contract 210/2012 “AMHEOS”, 2012-2016, participant, partner Romanian Academy, Cluj-Napoca Branch, Astronomical Observatory Cluj-Napoca.
- [9] European Space Agency, ESA Contract No.4000114740/NL/MM, „TELEGAL: Angular Position Measurement of Galileo Satellite with Telescopes”, 2015-2016, participant, subcontractor Romanian Academy, Cluj-Napoca Branch, Astronomical Observatory Cluj-Napoca.
- [10] Agenția Spațială Română, PN III-STAR, Contract 118/14.11.2016 „Centre of Competence for Planetary Sciences - ASTRES”, project number 513, 2016-2018, participant, team Romanian Academy, Astronomical Institute Bucharest.
- [11] Ministerul Cercetării și Inovării, Plan Sectorial, Contract 11PS/20.11.2017 “Dezvoltarea capacității de monitorizare și coordonare a activității de supraveghere spațială, pentru prognoza riscurilor asociate căderii din atmosferă și din cosmos a corpurilor naturale și artificiale (ARGOSS)”, 2017-2018, participant, partener Academia Română, Filiala Cluj-Napoca, Observatorul Astronomic Cluj-Napoca.
- [12] UEFISCDI, PN III-P1-1.2 – PCCDI-2017, Proiecte Complexe realizate în Consorții, Contract 16PCCDI/2018 “Capacități și Servicii Instituționale pentru Cercetarea, Monitorizarea și Prognoza Riscurilor din Spațiul Extraatmosferic (SAFESPACE)”, 2018-2020, participant, partener Academia Română, Filiala Cluj-Napoca, Observatorul Astronomic Cluj-Napoca.
- [13] European Space Agency, ESA Contract No. 4000125989/8/NL/IA, “SWARM IOP Support Contract – Simulations of Magnetic Perturbations On Board. Analysis around the VFM and potential improvements”, 2020-2021, participant, prime contractor Romanian Academy, Branch Cluj-Napoca, Astronomical Observatory Cluj-Napoca.

Relevant publications
(selection)

- [1] **A. Pop**, V. Turcu
Astrophysics and Space Science, **204** (1993), 233 – 241
The Study of Binary Systems with Pulsating Components Using the Frequency Modulation Theory
- [2] A. Dumitrescu, **A. Pop**, D. Dumitrescu
Astrophysics and Space Science, **250** (1997), 205 – 226
Structural Properties of Pulsating Star Light Curves through Fuzzy Divisive Hierarchical Clustering
- [3] **A. Pop**
Romanian Astronomical Journal, **9** (1999), 131 – 138
On the Modelling of the Light-Time Effect
- [4] **A. Pop**, S. Codreanu
Astrophysics and Space Science, **275** (2000), 247 – 258
Light Curve Shape Variability of SZ Cas Light Curves Between 1978 – 1994
- [5] **A. Pop**, V. Liteanu, D. Moldovan
Astrophysics and Space Science, **284** (2003), 1207 – 1222
On the Period Variability of GP Andromedae
- [6] **A. Pop**, V. Turcu, S. Codreanu
Astrophysics and Space Science **293** (2004), 393 – 413
The Stability of the Light Curve of DL Cassiopeiae Between 1959 – 1997
- [7] **A. Pop**
In “The Light-Time Effect in Astrophysics. Causes and Cures of the O-C Diagram”, Edited by C. Sterken, Astronomical Society of Pacific Conference Series, Vol. **335** (2005), San Francisco: Astronomical Society of Pacific, 263 – 268
On the Orbital Period Modulation of the Eclipsing Binary System Y Leonis
- [8] **A. Pop**, R. Roman
Romanian Astronomical Journal, **16** (2006), 151 – 165
Light Curve Variability of RZ Cephei. Part IV. Featuring the Shape of the Light Curve
- [9] **A. Pop**
Romanian Astronomical Journal, **17** (2007), 35 – 46
On the Detection and Diagnosis of Low Level Photometric Variability
- [10] **A. Pop**, C. Vamoș
Romanian Astronomical Journal, **17** (2007), 101 – 108

The Detection and Diagnosis of Low Level Stellar Variability through Resampling Methods

[11] V. Turcu, **A. Pop**, D. Moldovan

Information Bulletin on Variable Stars, No. 5826 (2008)

Discovery of Short-Periodic Pulsating Component in the Eclipsing Binary Y Leonis

[12] **A. Pop**, C. Vamoş, V. Turcu

The Astronomical Journal, **139** (2010), 425 – 433

Deterministic Components in Y Oph Light Curve Amplitude

[13] V. Turcu, **A. Pop**, A. Marcu, D. Moldovan

Astrophysics and Space Science, **331** (2011), 105 – 113

Y Leonis: Light Curve Solution Revised and Search for Photometric Variations during Primary Minimum

[14] **A. Pop**, V. Turcu, A. Marcu

Astrophysics and Space Science, **333** (2011), 17 – 28

The intriguing orbital period variability of Y Leonis

[15] **A. Pop**, C. Vamoş

New Astronomy, **17** (2012), 667 – 672

Biperiodic orbital period modulation of the W UMa binary system CK Boo

[16] **A. Pop**, C. Vamoş

New Astronomy, **23 – 24** (2013), 27 – 35

Orbital period modulation of the eclipsing binary system ER Vulpeculae: Real or not?

[17] M. Crăciun, C. Vamoş, **A. Pop**

Monthly Notices of the Royal Astronomical Society, **448** (2015), 2066 – 2076.

Detection of low level periodic signals through enhanced self-correlation method. The case of ER Vulpeculae

[18] M. Birlan, M. Popescu, D. A. Nedelcu, V. Turcu, **A. Pop**, B. Dumitru, F. Stevance, O. Vaduvescu, D. Moldovan, P. Rocher, A. Sonka, L. Mircea

Astronomy & Astrophysics, **581** (2015), A3, 7 pp.

Characterization of (357439) 2004 BL86 on its close approach to Earth in 2015

[19] **A. Pop**, M. Crăciun, G. R. Mocanu, C. Vamoş

Astrophysics and Space Science, **362** (2017), article id. 76, 15 pp.

Evidence for quasiperiodicity in orbital period modulation of WW Cygni

[20] **A. Pop**

Romanian Astronomical Journal, **19** (2019), 127 - 133

The Signature of Precession on the Light Travel Time Effect in a Pulsating Star with an Unseen Companion

Publications 1 book (first author)
 71 scientific papers

Informații adiționale

Member of
professional
organizations

1. International Astronomical Union (IAU / UAI) (2000):

Member of the Division B Facilities, Technologies and Data Science

Member of the Division G Stars and Stellar Physics

Member of the Division B Commission B3 Astroinformatics and Astrostatistics

Member of the Division G Commission G1 Binary and Multiple Star Systems

Member of the Division G Commission G4 Pulsating Stars

2. European Astronomical Society (1991 – present)

3. Romanian National Committee for Astronomy (R. N.C.A.) (1996 – present)

- Member in the Executive Office of R.N.C.A. (2006 - 2015)

- Vice-President R.N.C.A. (2015 – 2019; 2019 - present)

4. Member in the Editorial Board of Romanian Astronomical Journal (Romanian Academy Press)