

# Geza Kovacs

## Main fields of research:

Extrasolar planets: transit search and analysis; Nonlinear stellar pulsations: numerical modeling

## Education:

1970–1975: M.Sc. in physics and astronomy, Eötvös Loránd University, Budapest  
1981: Ph.D. degree in astronomy, Eötvös Loránd University.  
Title: “The Fourier Analysis and Its Application in the Research of Variable Stars”. Rank: summa cum laude  
1995: D.Sc. title, Hungarian Academy of Sciences.  
Title: “Nonlinear Stellar Pulsations”

## Employment:

1975– 2016: research fellow, Konkoly Observatory, Budapest  
2016– : professor emeritus, Konkoly Observatory, Budapest

## Postdoctoral and other positions:

1980, 4 months: Copernicus Astronomical Center Warsaw  
– visiting astronomer  
1984–1986: Department of Physics, University of Florida  
1988–1989: Department of Physics, University of Florida  
1990–1992: Department of Physics, University of Florida  
– postdoctoral associate  
1998, 1 month: IGPP, Lawrence Livermore Laboratory  
– consultant  
2012–2014: Department of Physics and Astrophysics, University of North Dakota  
–visiting professor (Oliver L. Benediktson Endowed Chair)

## Memberships in international scientific organizations:

1982–present: I.A.U.  
1990–present: E.A.S.  
1997–2002: Astronomy & Astrophysics  
–member of the Board of Directors  
2009–2010: ETSRC (European Telescope Strategy Review Committee)  
–panel member  
2010–2017: ISRN (International Scholarly Research Network)  
–Editorial Board  
2015–2018: OPTICON (Optical Infrared Coordination Network) TAC  
–panel member  
2018– : Advances in Astronomy  
–Editorial Board

## **SOC memberships:**

- 1987: “Multimode Stellar ...”, workshop, Budapest — LOC Chairman  
1988: I.A.U. Coll. No. 111, Lincoln, NB  
1995: I.A.U. Coll. No. 155, Cape Town  
1997: “A Half Century of Stellar Pulsation ...”, Los Alamos  
1997: Joint Discussion No. 24, I.A.U. G.A. No. 23, Kyoto  
1999: I.A.U. Coll. No. 176, Budapest — LOC Chairman  
2001: “ $\omega$  Centauri: A unique ...”, conference, Cambridge, GB
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## **Invited talks at conferences and workshops:**

- 1992: I.A.U. Coll. No. 134, Mito, Japan  
1992: I.A.U. Coll. No. 139, Victoria, BC, Canada  
1993: Eight Annual Workshop in Nonlinear Astr., Gainesville, Florida  
2001: I.A.U. Coll. No. 185  
2009: “Stellar Pulsation: Challenges for Theory and Observations”, Santa Fe, NM  
2015: “Networking Qatar Exoplanet Research”, workshop, Doha, Qatar  
2015: “High-precision studies of RR Lyrae stars”, workshop, Visegrád, Hungary  
2016: “Wide-field Variability Surveys ...”, San Pedro de Atacama, Chile
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## **Contributed talks:**

- 1989: “Numerical Modelling of ...”, NATO worlshop, Les Arcs, France  
1996: 12-th IAP Coll., Paris, France  
1997: “A Half-Century of ...”, conference, Los Alamos, USA  
1997: “Views on ...”, workshop, Sant Agata, Italy  
2001: “ $\omega$  Centauri: A unique ...”, conference, Cambridge, UK  
2005: “Stellar Pulsation and Evolution”, conference, Rome, Italy  
2006: “Transiting Extrasolar Planets ...”, conference, Heidelberg, Germany  
2008: “Stellar Pulsation: Challenges for ...”, conference, Wroclaw, Poland  
2017: “Revival of the Classical Pulsators ...”, workshop, Niepolomice, Poland  
2019: “Single, Shallow & Strange ...”, workshop, Coventry, UK  
2019: “RRL/Cep 2019 - Frontiers of ...”, workshop, Cloudcroft, NM, USA  
2019: “Exoplanet Vision 2050 ...”, workshop, Budapest, Hungary
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## **Edited proceedings:**

- 1988: Multimode Stellar Pulsations (Konkoly Observatory – Kultúra); Co-editors:  
L. Szabados and B. Szeidl
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## Scientometric data<sup>1</sup> (as of November 17, 2019):

Total number of independent citations = 4770

Number of journal publications = 110

Number of conference papers = 43

Cummulative impact factor = 554

Hirsch index = 37

## Selected papers:

- Kovacs, G., 1981, *Ap&SS*, **78**, 175; FREQUENCY SHIFT IN FOURIER ANALYSIS
- Buchler, J. R., Kovacs, G., 1987, *ApJ*, **320**, L57; PERIOD DOUBLING BIFURCATIONS AND CHAOS IN W VIRGINIS MODELS
- Jurcsik, J., Kovacs, G., 1996, *A&A*, **312**, 111; DETERMINATION OF [FE/H] FROM THE LIGHT CURVES OF RR LYRAE STARS
- Kovacs, G., 2000, *A&A*, 363, L1; THE DISTANCE MODULUS OF THE LARGE MAGELLANIC CLOUD BASED ON DOUBLE-MODE RR LYRAE STARS
- Kovacs, G., Walker, A. R., 2001, *A&A*, **371**, 579; EMPIRICAL RELATIONS FOR CLUSTER RR LYRAE STARS REVISITED
- Kovacs, G., Zucker, S., Mazeh, T., 2002, *A&A*, **391**, 369; A BOX-FITTING ALGORITHM IN THE SEARCH FOR PERIODIC TRANSITS
- Kovacs, G., Bakos, G., Noyes, R. W., 2005, *MNRAS*, **356**, 557; A TREND FILTERING ALGORITHM FOR WIDE-FIELD VARIABILITY SURVEYS
- Bakos, G. A., Kovacs, G., Torres, G. et al., 2007, *ApJ*, **670**, 826; HD 147506B: A SUPERMASSIVE PLANET IN AN ECCENTRIC ORBIT TRANSITING A BRIGHT STAR
- Kovacs, G., Bakos, G. A., Hartman, J. D. et al., 2010, *ApJ*, **724**, 866; HAT-P-15b: A 10.9 DAY EXTRASOLAR PLANET TRANSITING A SOLAR-TYPE STAR
- Kovacs, G., 2018, *A&A*, **614**, L4; ARE ALL RR LYRAE STARS MODULATED?

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<sup>1</sup>Notes:

- Excluding citations by anyone on the author list
- Including citations in arXiv
- Without citations in arXiv: 4636