

## **Short Curriculum Vitae of Dr. Spyros Basilakos**

I am a cosmologist with a career spanning scientific research, academic teaching and science communication. I have held a number of academic positions at various universities around Europe. Currently I am the head of the Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing (IAASARS) at the National Observatory of Athens, and Director of Research at the Academy of Athens (Research Center for Astronomy and Applied Mathematics – RCAAM). I am the President of the Greek National Committee for Astronomy (GNCA) and the National Delegate in the International Astronomical Union (IAU). Notice that GNCA advises the Greek government for issues which are related with Astronomy and Astrophysics. Also, I am the National Delegate in the International Astronomical Union (IAU) and full member of the European Astronomical Society. Since 09/02/2021 I am serving the governing board of National Observatory of Athens from the post of Vice-President.

I completed my PhD studies in Cosmology at the University of Athens. During the period 1999-2002, I worked as a PPARC fellow at the Imperial College (UK). From 2002 to 2005, I worked within NOA's (National observatory of Athens) program searching for the clustering properties of the large scale structures. In 2005 I joined the astrophysics group at the University of Groningen (The Netherlands) as a NOVA fellow. For the period 2006-2014 I was a faculty member (Senior Researcher) at the Academy of Athens (RCAAM) and a Visiting Professor at the University of Barcelona (2011-2012). Today I am Director of Research at the Academy of Athens, adjunct professor at the European University of Cyprus and head of IAASARS. In 2013, 2014, 2017 and 2019 I participated in the international Gravity competition organized by the Gravity Research Foundation (GRF-USA) and my scientific works received honorable mentions by GRF. Moreover, I supervised a large number of PhD and MSc theses and I participated in several international collaborations and scientific programs. My research work has led to a large number of scientific articles. Currently, I give lectures in Cosmology and General Relativity at the University of Athens and contribute to public engagement events in science.

### **1. Publications - Research monographs:**

My research work has led to ~230 scientific articles out of which 173 (9 review articles) in refereed journals and 55 in conference proceedings. Out of the **173** refereed publications, I am the first author in ~42% of these, while I am a single author in **10** publications (research monographs). Finally, my total number of citations The total number of citations to all my papers is (a) ~6000, normalized cit. ~ 1770, h-index =43 (source: SAO/NASA ADS) and (b) ~7080, h-index = 49 (source: Google Scholar) according to the following databases:

(<https://scholar.google.gr/citations?user=mknfnlAAAAAJ>  
[http://adsabs.harvard.edu/abstract\\_service.html](http://adsabs.harvard.edu/abstract_service.html)).

*The total list of publications can be found in* (<http://astro.academyofathens.gr/people/sbasil/>).

### **2. Conference participation, organization & seminars:**

In total have participated in over 90 international and national conferences in most of which I have presented my work orally or as an invited speaker. I have participated in the LOC of 16 scientific international conferences. Also, I have been invited to present seminars (more than 50) in various departments and institutes (cf. Durham Univ., Cambridge Univ., Imperial College, Sussex Univ., Nottingham Univ., Universidad Autonoma de Madrid - Spain, Universidad de Barcelona – Spain, University of Leiden - The Netherlands and INAOE in Mexico).

### **3. International Awards - Theorems and Lemmas:**

In 2013, 2014, 2017 and 2019 I participated in the international Gravity competition organized by the Gravity Research Foundation (GRF -USA) and my scientific works received honorable mentions by

GRF. Specifically, these articles are: (i) "From inflation to dark energy through a dynamical  $\Lambda$ : an attempt at alleviating fundamental cosmic puzzles", (ii) "A viable Starobinsky-like inflationary scenario in the light of Planck and BICEP2 results" by Basilakos, Lima & Sola, (iii) "Measuring the effects of loop quantum cosmology in the CMB data" by Basilakos, Kamali & Mehrabi and (iv) "Do we come from a Quantum Anomaly?". These articles have been published by the Int. J. of Mod. Phys. D. In my publications among many propositions I have published **2 Lemmas and 4 Theorems**.

#### **4. Teaching, training of students:**

- $\lambda$  I taught (tutorials) at the Imperial College for two academic years (1999-2001) the undergraduate first year course in Mathematics/Astrophysics. Currently, I give lectures in Cosmology and General Relativity at the University of Athens (started in 2013, Depart. of Mathematics & Physics)
- $\lambda$  Supervision of 5MSc and 10 PhD theses.

#### **5. Referee – Review Editor:**

I am official referee of the European Science Foundation (ESF), the French National Research Agency (ANR) and the National Research Agency in Chile (FONDECYT) in the field of Cosmology. I am a regular referee of journals GRG, MNRAS, PLB, JCAP, EPJC, CQG, ApJ, PRD, Astronomy & Astrophysics, IJMPD. I was an editor of the Special Issue of IJMPD (published in 2015) on the topic "Testing Inflationary scenarios with the Planck and BICEP2 data". Also, I am serving the Editorial Board of the following refereed journals: "High-Energy and Astroparticle Physics" and "The Universe".

#### **6. Organization of Research Groups:**

I have established, together with my colleagues (J. Sola, M. Plionis, A. Lima, S. Capozziello, J. Barrow, N. Mavromatos) "*The Physics of dark energy*" research group. Our team studies the dynamical properties of the Friedmann Robertson Walker metric in various cosmological models included those of extended theories of gravity (Finsler, Gauss-Bonnet, Brans-Dicke, scalar tensor theories,  $f(R)$ ,  $f(T)$  etc).

#### **7. Funding of scientific projects of which I am PI or Partner:**

Funds acquired mostly through competitive calls by European and National funding agencies. Currently, the total amount tends to  $\sim 2M\text{€}$ .

#### **8. Administrative Positions**

- (a) Director of the Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing (IAASARS) at the National Observatory of Athens (term 2018-2022).
- (b) Member of the Board of Directors, National Observatory of Athens (term 2018-09/02/2021)
- (c) Vice president of the Governing Board of the Nat. Obs. of Athens (09/02/2021-today)
- (d) Director of Kryoneri and Helmos Astronomical Stations, Nat. Obs. Athens (2018-today).
- (e) President of the Greek National Committee for Astronomy and National Delegate in the International Astronomical Union (IAU: term 2020-2022).
- (f) National Delegate in the ESA/Scylight project "Fibre in the Sky" (2019-today).
- (g) Member of the board of Directors for the Optical Radio Project (ORPQ 2019-today)
- (h) Appointed by the Hellenic Ministry of Education, member of the committee that proposed the National Council for Research and Technology for the period 2017-2021.
- (i) Elected member of the service council of the Academy of Athens (2016-2018).
- (j) Member of the Governing Board of the Hellenic Soc. of Gravitation & Cosmology (2016-2018).

(k) Vice-president of the Governing Board of the association of researchers at the Academy of Athens (2011-2014).