

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	José Antonio		
Family name	Langa Rosado		
ID number			
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-8765-0764		

(*) Mandatory

A.1. Current position

Position	Catedrático de Universidad		
Initial date	05/12/2016		
Institution	Universidad de Sevilla		
Department/Center	EDAN	Facultad de Matemáticas	
Country	España	Teleph. number	
Key words	Dynamical systems; Non-autonomous and random equations; applications to ecology and Neuroscience		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
1994-1997	PhD student
1997-2002	Profesor Asociado
2002-2016	Profesor Titular de Universitaria
2016-present	Catedrático de Universidad

A.3. Education

Licenciatura/Grado/Doctorado	Universidad	Año
Licenciado Matemáticas	Sevilla	1994
Doctor en Matemáticas	Sevilla	1998
Doctor Europeo	Sevilla	1998

Part B. CV SUMMARY (*max. 5000 characters, including spaces*)

José A. Langa Rosado is University Professor since 2016. He defended his doctoral thesis in 1998 on attractors for random dynamical systems (related to stochastic partial differential equations). His doctoral thesis was awarded the Extraordinary Doctoral Prize, with the mention of European Doctorate, having been carried out with several stays at the universities of Cambridge, Oxford and Warwick.

He has specialized in the study of dynamical systems in infinite dimension. He has been able to develop, together with other researchers, the current theory of attractors for non-autonomous dynamical systems (existence, characterization, fractal dimension, geometric structure...). It is worth mentioning the elaboration and publication of more than 110 research articles in international journals cataloged in the JCR. In 2013 he has published, together with A.N. Carvalho, Brazil, and J.C. Robinson, UK, a book for Springer (AMS Series) on dynamical systems and attractor structure. In 2020 he has published, together with M. C. Bortolan and A.N. Carvalho a second book on attractor structure for evolutionary processes in the research monographs of the American Mathematical Society.

In 2006 he received the Young Researcher Award from the Real Academia Sevillana de Ciencias. He has been PI of the Excellence Project of the Junta de Andalucía P12-FQM-1492. He has been responsible for the University of Seville of the Brazilian-European partnership in Dynamical Systems (BREUDS), a project of the FP7-IRSES of the European Union, integrated by 32 Universities. He has also been PI of two projects of the Junta de Andalucía: reference P20_00592, and, together with Tomás Caraballo, reference US-1254251.

He is a regular reviewer for numerous international scientific journals, and associate editor of Discrete and Continuous Dynamical Systems-B, International J. of Diff. Equations.

His latest projects include as a central theme the study of human consciousness, from models of global dynamics in the brain. With these projects he has initiated a truly interdisciplinary work in which Dynamical Systems Theory and Graph Theory are being applied to the fascinating problem of trying to understand human consciousness. He is also member of a working group with leading Ecologists developing a new framework for studying robustness and assembly strategies for biodiversity in real ecosystems.

He has been supervisor of 9 PhD students. Supervisor of 12 Master students, and supervisor of 22 degree students (minor thesis).

Number of six-year research periods: four

Date of the last six-year research period granted: 31/12/2019.

Number of doctoral theses supervised in the last 10 years: 9

ISI Web of Knowledge:

Publicaciones totales: 108

Citas totales: 2620

Índice h: 30

Scopus

Publicaciones totales: 126

Citas totales: 3173

h-index: 32

Google Scholar:

Citas totales: 4916

h-index: 39

i10-index: 84

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

I include the most ten relevant publications in last 5 years.

1. Godoy, O., Soler-Toscano, F., Portillo, J.R., Langa, J.A. The assembly and dynamics of ecological communities in an ever-changing world. Ecological Monographs, 94 (49), e1633 (2024).
2. Almaraz, P., Kalita, P., Langa, J.A., Soler-Toscano, F. Structural stability of invasion graphs for Lotka–Volterra systems. J. Mathematical Biology, 88 (64), pp 1-25 (2024).
3. AN Carvalho, L Rocha, JA Langa, R Obaya. Structure of non-autonomous attractors for a class of diffusively coupled ODE. Discrete & Continuous Dynamical Systems-Series B 28 (1) (2023).
4. M.C. Bortolan, A.N. Carvalho, J.A. Langa. G. Raugel, Nonautonomous Perturbations of Morse–Smale Semigroups: Stability of the Phase Diagram, J.Dyn. Diff. Eqs 34 (2022).
5. H Cui, AC Cunha, JA Langa. Finite-dimensionality of tempered random uniform attractors Journal of Nonlinear Science 32 (1), 13 (2022).
6. JA Galadí, S Silva Pereira, Y Sanz Perl, ML Kringelbach, I Gayte, H Laufs, E Tagliazucchi, JA Langa, G Deco, Capturing the non-stationarity of whole-brain dynamics underlying human brain states. Neuroimage 244 (2021).
7. F.Soler-Toscano, J.A.Galadí, A. Escrichs, Y.Sanz Perl, A.López-González, J.D.Sitt, J. Annen, O. Gosseries, A. Thibaut, R. Panda, F.J. Esteban, S. Laureys, M.L. Kringelbach, J.A.Langa, G.Deco, What lies underneath: Precise classification of brain states using time-dependent topological structure of dynamics, Plos Comp. Biology 18 (9) (2022).
8. H Cui, AN Carvalho, AC Cunha, JA Langa. Smoothing and finite-dimensionality of uniform attractors in Banach spaces. Journal of Differential Equations 285, 383-428 (2021).
9. JA Langa, R Obaya, AM Sanz. Forwards attraction properties in scalar non-autonomous linear–dissipative parabolic PDEs. The case of null upper Lyapunov exponent. Nonlinearity 33 (9), 4277 (2020).
10. BOOK: Bortolan, AN Carvalho, JA Langa. **Attractors under autonomous and non-autonomous perturbations**. MC American Mathematical Soc. (2020).

C.3. Research Projects.

1. Reference: PID2021NB-122991NB-C21.

Title: Dinámica Determinista y Estocástica de modelos de las Ciencias Aplicadas

Entidad Financiadora: Ministerio de Ciencia e Innovación

Convocatoria: Plan Estatal 2017-2023

IP: Tomás Caraballo Garrido

Initial date: 01-09-2022 Final date: 31-08-2025

Grant amount: 217.800,00 € Tipo participación: Investigador

2. Reference: P20_00592. Title: Complejidad y sistemas dinámicos: teoría matemática y aplicaciones a ecología y a la neurociencia de la consciencia
IP: José Antonio Langa Rosado
Tipo de Proyecto/Ayuda: Proyectos I+D+i FEDER Andalucía 2014-2020
Initial date: 05-10-2021 Final date: 31-12-2022
Grant amount: 32.700 euros.
3. Reference: US-1254251. Title: Deterministic and stochastic dynamics of models from Neuroscience, Epidemiology, Biology and other branches of the Applied Sciences. IPs: Tomás Caraballo Garrido / José Antonio Langa Rosado
Tipo de Proyecto/Ayuda: Proyectos I+D+i FEDER Andalucía 2014-2020
Initial date: 01-02-2020 Final date: 31-01-2022
Grant amount: 60.000 euros.
4. Reference: MTM2014-61312-EXP
Title: Dinámica fractal de la consciencia: de la teoría a la implementación clínica.
IP: José A. LangaRosado
From/to: 01/09/2015 a 31/08/2017
Entidad financiadora: Proyectos Explora Ciencia. Ministerio de Economía y Competitividad.
Grant amount: 30.000 euros.
5. Reference: P12-FQM-1492
Title: Análisis y Aplicaciones de Sistemas Dinámicos no Autónomos y Estocásticos
IP: José Antonio Langa Rosado (Universidad de Sevilla)
Entidad financiadora: Proyectos de Excelencia de la Junta de Andalucía
From/to: 30/01/2014-29/01/2018
Grant amount: 122.072,75 euros