

CV Date	28/11/2025
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Part A. PERSONAL INFORMATION

First Name	Jorge Luis		
Family Name	Navarro Camacho		
Sex	Male	Date of Birth	26/07/1966
ID number Social Security, Passport	27463470K		
URL Web	https://webs.um.es/jorgenav/miwiki/doku.php?id=inicio		
Email Address	jorgenav@um.es		
Open Researcher and Contributor ID (ORCID)	0000-0003-2822-915X		

A.1. Current position

Job Title	Catedrático de Universidad		
Starting date	2010		
Institution	Universidad de Murcia		
Department / Centre	Departamento de Estadística e IO / Facultad de Matemáticas		
Country		Phone Number	
Keywords	Physics chemical and mathematical; Natural sciences and health sciences; Engineering		

A.2. Previous positions (Research Career breaks included)

Period	Job Title / Name of Employer / Country
1997 -	Profesor Titular de Universidad / Universidad de Murcia

A.3. Education

Degree/Master/PhD	University / Country	Year
Doctor en Ciencias Matemáticas	Universidad de Murcia	1995
Licenciado en Ciencias Matemáticas	Universidad de Murcia	1989

Part B. CV SUMMARY

I have a solid research career mainly based on dependence modelling in different areas such reliability theory in networks and systems, survival analysis and risk analysis. In all these areas, in many cases, the assumption of independence is unrealistic and it leads to big mistakes (economic crisis, electric power outages, over estimated survival functions, etc.). Therefore, the dependence must be included in the models and several tools should be developed to apply them to different concepts such as reliability, risks, survival probability, stochastic comparisons, etc. In fact, this end has been the main topic in my research career, providing several useful tools to do so as, for example, the representations based on signatures or distortions used to compute the system reliability and to stochastically compare systems with different structures or dependence models. In that sense, I want to mention the publication in 2022 of a book (see ref. 10 below) in Springer which is a reference manuscript in the reliability analysis of networks and systems.

Regarding the formation of young researchers, I want to mention my collaboration with several young researchers as Antonio Arriaza (Universidad de Cádiz, Spain), Camilla Cali and Francesco Buono (University degli Studi di Napoli Federico II, Naples, Italy) and Marco Calpaldo (RWTH Aachen University, Aachen, Germany). All of them visited my department in different periods. Also I was the supervisor (jointly with professor Antonio Di Crescenzo) of the PHD Thesis of Marco Capaldo defended at the Dipartimento di Matematica of Università degli Studi di Salerno, in Salerno, Italy, in April, 2025. He is now working in a postdoc position at the RWTH Aachen University, Aachen, with the funds of a research project where I collaborate as well (see project 1 below).

I want also mention that my preceding work have a relevant impact in my research area, as can be confirmed with the high citation indices of my papers, including the fact that I have been included in the prestigious Stanford researchers lists with the top 2% of researchers in the area of Statistics and Probability. In this sense, I have have been invited to present several plenary talks in the main conferences in our area and we have organized them in our university (12th International conference on Mathematical Methods in Reliability, Murcia 2023 and 10th International Conference on Ordered Statistical Data, Murcia 2012). I usually belong to the Scientific Program Committees of these conferences as well. I'm also associate editor of several journals.

I want also to include some objective items that show the relevance of my research work in the international research community.

WoS (Nov. 2025): ResearcherID: G-4706-2013.

Factor h-index: 36 (36 JCR papers with more than 36 citations in JCR papers, WoS).

Publications: 169. Times cited: 4396. Citing articles: 1881.

Times Cited without self-citations: 3587. Citing Articles without self-citations: 1745.

SCOPUS (Nov. 2025): SCOPUS Author ID: 55684418400

h-index 39: 4751 citations by 2041 documents. Documents 146.

Google Scholar (Nov. 2025): h-index 46 (28 since 2020). Citations 6466 (2895 since 2020)

Stanford researcher lists: I have appeared in all the Stanford researcher lists (2020-2024). 2024 list:

List S7 top 2% (papers published on 2023 in SCOPUS): Ranked 277/22428 in Stat. & Probab.

List S6 top 2% (papers published on or before 2023): Ranked 303/22428 in Stat. & Probab.

Best Mathematics Scientist list (2022-2025):

Research.com. 2025: Ranked #31 in Spain and #1879 in the world.

D-index: 39.

Associate editor of: Metrika, since 2017; Journal of Applied Probability, since 2016; Advances in Applied Probability, since 2016; İSTATİSTİK, Journal of the Turkish Statistical Association, since 2012; The Spanish Journal of Statistics (SJS), since 2020; IEEE Transactions on Reliability, 2018-2024; Journal of Statistical Planning and Inference, from 2008 to 2012.

Sexenios (Spanish research evaluations): Five, all positive. 1994-1999 (10 JCR papers), 2000-2005 (17 JCR papers), 2006-2011 (44 JCR papers), 2012-2017 (33 JCR papers) and 2018-2023 (36 JCR papers).

PhD Thesis directed/co-directed: 6 (2025, 2011, 2007, 2005, 2002, 1997).

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Most important publications in national or international peer-reviewed journals, books and conferences

AC: corresponding author. (nº x / nº y): position / total authors. If applicable, indicate the number of citations

- 1 **Scientific paper.** Navarro J.; Sarabia J.M.2024. A note on the limiting behaviour of hazard rate functions of generalized mixtures. Journal of Computational and Applied Mathematics. 435, pp.114653. ISSN 0377-0427. <https://doi.org/10.1016/j.cam.2022.114653>
- 2 **Scientific paper.** Buono F.; Cramer E.; Navarro J.2024. Predicting future failures in generalized order statistics and related models. Statistics. 58-4, pp.918-942. <https://doi.org/10.1080/02331888.2024.237961>
- 3 **Scientific paper.** Buono F.; Navarro J.2024. Simulations and predictions of future values in the time-homogeneous load-sharing model. Statistical Papers. 65, pp.661-685. <https://doi.org/10.1007/s00362-023-01404-5>
- 4 **Scientific paper.** Arriaza A.; Navarro J.; Sordo M.A.; Suárez-Llorens A.2023. A variance-based importance index for systems with dependent components. Fuzzy Sets and Systems. 467-108482. <https://doi.org/10.1016/j.fss.2023.02.003>
- 5 **Scientific paper.** Pellerey, F.; Navarro, J.2022. Stochastic monotonicity of dependent variables given their sum. Test. 31, pp.543-561. ISSN 1133-0686. <https://doi.org/10.1007/s11749-021-00789-5>
- 6 **Scientific paper.** Torrado, N.; Arriaza, A.; Navarro, J.2021. A study on multi-level redundancy allocation in coherent systems formed by modules. Reliability Engineering and System Safety. 213, pp.107694. ISSN 0951-8320. <https://doi.org/10.1016/j.ress.2021.107694>
- 7 **Scientific paper.** Navarro, J.; Rychlik, T.; Spizzichino, F.2021. Conditions on marginals and copula of component lifetimes for signature representation of system lifetime. Fuzzy Sets and Systems. 415, pp.99-117. <https://doi.org/10.1016/j.fss.2020.11.006>
- 8 **Scientific paper.** Navarro, J.; Fernández-Martínez, P.2021. Redundancy in systems with heterogeneous dependent components. European Journal of Operational Research. 290, pp.766-778. ISSN 0377-2217. <https://doi.org/10.1016/j.ejor.2020.08.011>
- 9 **Scientific paper.** Navarro, J.; Arriaza, A.; Suárez-Llorens, A.2019. Minimal repair of failed components in coherent systems. European Journal of Operational Research. 279, pp.951-964. ISSN 0377-2217. <https://doi.org/10.1016/j.ejor.2019.06.013>
- 10 **Scientific book or monograph.** Navarro, J.2022. Introduction to System Reliability Theory. Springer. Springer. ISBN 978-3-030-86952-6. Springer Nature (5)

C.2. Conferences and meetings

- 1 Preservation of aging classes under the formation of coherent systems. 13th International Conference on Mathematical Methods in Reliability, MMR 2025. Universidad Adolfo Ibáñez, Viña del Mar, Chile. 2025.
- 2 Ordered data. 16th International OSD Conference on Order in Statistical Data: Order Statistics and Beyond (ODOS). RWTH Aachen University, Aachen, Germany. 2025. Participatory - Plenary session. Conference.
- 3 Stochastic properties of sums of dependent random variables (risks). 11th International Conference on Statistics, ICAS 2025, Bologna, Italy. 2025. Participatory - Plenary session. Conference.
- 4 Weak Dependence Notions. 9th Workshop on Dependence Modelling DEMO2024, Ischia, Naples, Italy. The Finance, Insurance, Risk & Economics research group of Vrije Universiteit Brussel. 2024. Participatory - invited / keynote talk. Conference.
- 5 Are the order statistics ordered? A copula approach. 15th International Conference on Ordered Statistical Data, OSD2024. Dep. Mathematics, Univ. Coimbra, Portugal. 2024.
- 6 Prediction of future data in multivariate constant conditional hazard rate models. XL Congreso Nacional SEIO, Elche. Sociedad Española de Investigación Operativa. 2023.
- 7 Preservation of aging classes in coherent systems. Spanish+Polish Mathematical Meeting, Lodz, Poland. RSME. 2023. Poland. Participatory - invited / keynote talk.
- 8 Are the order statistics ordered? (revisited). 34th European Meeting of Statisticians, EMS 2023, Warsaw, Poland. 2023. Poland.

- 9 Predicting system failures. 12th International Conference on Mathematical Methods in Reliability, MMR2023, Murcia. Universidad de Murcia. 2023. Spain. Organizational - President of Committee. Conference.
- 10 Navarro, J.. Minimal repair of failed components in coherent systems.. 13th International Conference Ordered Statistical Data OSD2018, Cádiz, Spain. Universidad de Cádiz. 2018. Spain. Participatory - Plenary session. Conference.

C.3. Research projects and contracts

- 1 **Project.** Coherent Systems: Structural and Statistical Reliability Analysis under load-sharing models (CoSyStaR). German Research Foundation (DFG). Maria Kateri. 01/10/2025-31/03/2027. 127.000 €. Team member.
- 2 **Project.** COMPARACIONES ESTOCASTICAS BAJO ESTRUCTURAS DE DEPENDENCIA CON APLICACIONES A FIABILIDAD Y FINANZAS. TEORIA E INFERENCIA. Jorge Navarro. (Universidad de Murcia). 01/09/2023-31/08/2026. 33.750 €.
- 3 **Project.** EVALUACIÓN DEL RENDIMIENTO, FIABILIDAD, EFICIENCIA ENERGÉTICA Y ANÁLISIS DE COSTES EN INSTALACIONES SOLARES FOTOVOLTAICAS. Agencia Estatal de Investigación (AEI). Nuria Torrado Robles. (Universidad Autónoma de Madrid). 01/12/2022-30/11/2024. 29.900 €.
- 4 **Project.** PID2019-103971GB-I00/AEI/10.13039/501100011033, ORDENACIONES ESTOCASTICAS BAJO DEPENDENCIA: TEORIA, INFERENCIA Y APLICACIONES. MINISTERIO DE CIENCIA E INNOVACIÓN, AGENCIA ESTADAL DE INVESTIGACIÓN (AEI). Jorge Navarro. (Universidad de Murcia). 01/06/2020-31/05/2023. 49.852 €. Principal investigator.
- 5 **Project.** MTM2016-79943-P, MODELOS PROBABILISTICOS EN FIABILIDAD: ESTUDIO, COMPARACION Y SELECCION DE MODELOS. MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD. Félix Belzunce. (Universidad de Murcia). 30/12/2016-29/12/2019. 41.987 €. Principal investigator.
- 6 **Project.** MTM2012-34023-FEDER, COMPARACION Y DEPENDENCIA EN MODELOS PROBABILISTICOS CON APLICACIONES EN FIABILIDAD Y RIESGOS. MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD. José M. Ruiz. (Universidad de Murcia). 01/01/2013-31/12/2016. 49.140 €.
- 7 **Project.** ESTUDIO DE LA FIABILIDAD Y ENVEJECIMIENTO DE LOS SISTEMAS COHERENTES. FUNDACION SENECA AGENCIA DE CIENCIA Y TECNOLOGIA DE LA REGION DE MURCIA. Jorge Navarro. (Universidad de Murcia). 01/01/2009-31/12/2015. 12.600 €.
- 8 **Project.** MTM2009-08311, ESTUDIO DE DEPENDENCIA Y ORDENACIÓN DE MODELOS PROBABILÍSTICOS CON APLICACIONES EN TEORÍA DE FIABILIDAD Y TEORÍA DE RIESGOS. MINISTERIO DE CIENCIA E INNOVACIÓN. José M. Ruiz. (Universidad de Murcia). 01/01/2010-31/12/2012. 50.820 €.
- 9 **Project.** MTM2006-12834, ORDENACIONES MULTIVARIANTES Y CONJUNTAS Y SU APLICACIÓN EN FIABILIDAD. MINISTERIO DE EDUCACION Y CIENCIA. José M. Ruiz. (Universidad de Murcia). From 01/10/2006. 24.000 €.
- 10 **Project.** INTERCAMBIABILIDAD Y DEPENDENCIA EN FIABILIDAD. FUNDACIÓN SÉNECA.. José M. Ruiz. (Universidad de Murcia). From 01/01/2005. 16.000 €.