

Juana Sendra

[CUNEF UNIVERSIDAD](#)
Almansa 101, 28040 Madrid Spain
juana.sendra@cunef.edu
[CUNEF Website](#)
[Google scholar](#)
[ORCID](#)

EMPLOYMENT

Associate Professor, Dept. of Mathematics. CUNEF Universidad (Tenured Professor, 2014).

EDUCATION

- PhD in Mathematics. Universidad Politécnica de Madrid (UPM).1999
- B.Sc. in Mathematics Universidad Complutense de Madrid (UCM). 1991.

FIELDS OF INTEREST

Symbolic Computation, and the applicability of mathematical tools in engineering problems. Effective algebraic geometry.

PUBLICATIONS

1. Book on Symbolic Computation, 1 book (2 volumes) on Linear Algebra, and several book chapters and several publications in conference proceedings.2024
2. Juana Sendra. 2024. "The Challenge of the Characteristic height of Bohemian Matrices: experiments with Maple and open problems." Maple Transactions. Vol.4 No.4 (2024). Winter Issue. DOI: [10.5206/mt.v4i4.21827](https://doi.org/10.5206/mt.v4i4.21827).
3. Juana Sendra. 2024. Video: "Computational Bohemian Art: from the real world to the Bohemian wordl". Computational Art Section. Maple Transactions. Vol.4 No.4 (2024). Winter Issue.
4. A. Lastra, J.R. Sendra, J. Sendra. 2023. "Symbolic treatment of trigonometric parametrizations: the general unirational case and applications". Communications in Mathematics and Statistics. Communications in Mathematics and Statistics (2023). <https://doi.org/10.1007/s40304-023-00334-w>
5. E. Chan, R. Corless, L. Gonzalez-Vega, J.R. Sendra, J. Sendra. 2022. "Inner Bohemian inverses". Applied Mathematics and Computation Vol. 421, 126945.
6. P. S. Stanimirovic, R. Behera, J. Keshari Sahoo, D. Masic, J.R Sendra, J. Sendra, A. Lastra. 2021."Computing tensor generalized inverses via specialization and rationalization". Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas 115:116. pp.1-16.

7. Predrag S. Stanimirovic, Miroslav Ciric, J. Rafael Sendra, Alberto Lastra, Juana Sendra. 2021. "Representations and symbolic computation of generalized inverses over fields". Applied Mathematics and Computation 406 (2021) 126287.
8. E. Chan, R. Corless, L. Gonzalez-Vega, J. R. Sendra, J. Sendra, E. Thornton. 2020. "Upper Hessenberg and Toeplitz Bohemians". Linear Algebra and its Applications, Vol. 601, pp.72-100.
9. M.C. Beltrametti, J. Sendra, L.M. Torrente. 2020. "Moore-Penrose approach in the Hough transform framework". Applied Mathematics and Computation, Vol. 375, pp.125083.
10. J.R.Sendra, J. Sendra. 2017. "Computation of Moore-Penrose generalized inverses of matrices with meromorphic function entries". Applied Mathematics and Computation, Vol. 313C, pp. 355-366.

WORKING PAPERS

- González–Vega L., Sendra J.R., Sendra J. "Eigenvalues of Real Matrices with Prescribed Principal Minors Sign and Descartes Law of Signs" arXiv: 2305.08861

SELECTED PRESENTATIONS

CONFERENCES

1. "Bohemian matrices and related topics in matrix theory. 25th Conference of the International Linear Algebra Society (ILAS)". Universidad Politécnica de Madrid. Madrid
2. "Real Sociedad Matemática Española. Sesión: Álgebra Computacional y Aplicaciones". Universidad de Castilla la Mancha.
3. "XVII Encuentro Álgebra Computacional y Aplicaciones. EACA" Universidad Jaime I.
4. Invited plenary conference at the "Maple Conference" Waterloo, Ontario. Canada.
5. "Workshop: Bohemian matrices and applications", University of Manchester. Manchester.
6. 12th International Conference on Artificial Intelligence and Symbolic Computation AISC 2014. Universidad de Sevilla. Sevilla
7. "Einstein in the city 2011". The City College of New York.
8. Workshop on Algorithmic Algebraic Geometry. University of Hong Kong, Hong Kong.

SEMINARS

- Research Institute for Symbolic Computation. Johannes Kepler Universität. AUSTRIA.
- Dept. of Computer Science, University of Hong Kong. HONG KONG.
- Institute of Discrete Mathematics and Geometry, Vienna University of Technology.
- Research Institute for Symbolic Computation. Johannes Kepler Universität. AUSTRIA.

PROFESSIONAL ACTIVITIES

- Secretary of the Accreditation Commission for the SIC Programme (International Quality) ANECA to date).
- Secretary, numerous evaluation panels of the International Program Quality, ANECA, (EURACE, EURO-INF and EUROLABEL).
- Secretary, WFME Programme Medical Seal Pilot Evaluation Panel of ANECA International Program Quality.