Javier Sendra Arranz

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ORCID

EMPLOYMENT

- Assistant Professor, Dept. of Mathematics, CUNEF Universidad. From 01.09.2024.
- PhD Student at Tübingen University. 01.09.2023-31.08.2024
- PhD Student at Max Planck Institute for Mathematics in the Science (Leipzig). 01.09.2021-31.08.2023.

EDUCATION

- PhD between Tübingen University and the Max Planck Institute for Mathematics in the Science (Leipzig) under the supervision of Prof. Daniele Agostini (2024).
- Master in Mathematics at The University of Bonn (2021).
- Bachelor degree in Mathematics at Universidad Complutense de Madrid (2019).

FIELDS OF INTEREST

Algebraic Game Theory, Hilbert Schemes, Algebraic curves, Tensor, Hypersurfaces.

PUBLICATIONS

 Agostini, Daniele. Markwig, Hannah. Nollau, Clemens. Schleis, Victoria. Sendra Arranz, Javier. Sturmfels, Bernd. "Recovery of Plane Curves from Branch Points". Discrete & Computational Geometry 72 (2), 451-475, 2023.

- Portakal, Irem. Sendra Arranz, Javier. "Nash Conditional Independence Curve".
 Journal of Symbolic Computation, Volume 122, 102255, 2024.
- Portakal, Irem. Sendra Arranz, Javier. "Game Theory of Undirected Graphical Models", *Journal of Algebra*, vol. 666, p. 574-606, 2025.

WORKING PAPERS

- Sendra Arranz, Javier. "The Hessian correspondence of hypersurfaces of degree 3 and 4".
- Bouyer, Matthieu. Portakal, Irem. Sendra Arranz, Javier. "Totally Mixed Conditional Independence Equilibria of generic games".
- Ríos Ortiz, Ángel David. Sendra Arranz, Javier. "Hilbert Scheme of points of Fold-like curves and their combinatorics".

SELECTED ACADEMIC HONOURS AND GRANTS

- "La Caixa Postgraduate Fellowship Abroad" for the first two years of my PhD studies at the Max Planck Institute for Mathematics in the Science. 01.09.2021-31.08.2023.
- "Study Scholarships for Graduates of All Disciplines" from the DAAD for the two years Master at the Universität Bonn. 01.09.2019-31.08.2021.
- One year (Academic course 2018-2019) scholarship "Beca de Colaboración" from the Spanish Ministery of Sciences to do research in the Department of Algebra, Geometry and Topology of Universidad Complutense de Madrid on Introduction to Algebraic Geometry.

SELECTED PRESENTATIONS

CONFERENCES

Admcycles: coding intersection theory - March 2022, MEGA 2022 - June 20-24 2022, Pfaffians, Tensors, and Applications - November 28-30, 2022, II Encuentro RSME-UMA - December 12-16, 2022, CGTA 2023 - June 19-23, 2023, SIAM AG 2023 - July 10-14, 2023, RSME's 7th Congress of Young researchers, Bilbao - January 13th-17th 2025. Computations in Algebraic Geometry: Complex, Real, and Tropical, ETH Zürich - August 25-29 2025

SEMINARS

Algebraic Geometry and Gromov-Witten Theory Seminar (Bonn Fall 2020+) - November 2020, Algebraic Geometry and Gromov-Witten Theory Seminar (Bonn Fall 2020+) - August 2021, Seminar on Nonlinear Algebra - March 2022, Oberseminar Kombinatorische Algebraische Geometrie Tübingen - November 9, 2022, Seminario de Doctorando de Matemáticas UCM - December 13, 2022, Oberseminar Algebra and Combinatorics, Leipzig University, May 11, 2023, Seminarios de Investigación de CUNEF Universidad, Madrid, March 2024, Applied CATS seminar, May 2024.

PROFESSIONAL ACTIVITIES

- Organizer of the Geometric Invariant Theory Reading Group. MPI MiS Leipzig. June 2022. Organizers: Javier Sendra-Arranz.
- Organizer of the Reading Group on Hilbert Schemes, MPI MiS Leipzig, March 2023. Organizers: Javier Sendra-Arranz.
- Organizer of the Reading Group on Algebraic Stacks. Tübingen University. January 2024-August 2024. Organizers: Clemens Nollau, Victoria Schleis and Javier Sendra-Arranz.
- Organizer of the Parallel session Combinatorial Algebra and Geometry at RSME's 7th Congress of Young researchers, Bilbao, January 13th-17th 2025.