

Davide LEGACCI

CONTACT INFORMATION

NAME: Davide Legacci
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TIMELINE

Aug. - Sept. 2023	Visiting period at Simons Laufer Mathematical Sciences Institute UNIVERSITY OF CALIFORNIA, BERKELEY, CALIFORNIA WORKSHOP: Mathematics and Computer Science of Market and Mechanism Design
Nov. 2022 - present	Doctoral student at École Doctorale MSTII UNIVERSITÉ GRENOBLE ALPES, Grenoble (FR) RESEARCH: Geometric Aspects of Learning and Evolution in Games SUPERVISORS: Panayotis Mertikopoulos , Bary S. R. Pradelski
Feb. 2022 - Aug. 2022	Subject Manager - Mathematics STUDYSMARTER , Munich (DE)
Sep. 2020 - Mar. 2022	Research assistant at STRUCTURES Excellence Cluster RUPRECHT-KARLS-UNIVERSITÄT HEIDELBERG, Heidelberg (DE) RESEARCH: Poisson Geometry of Riemannian Game Dynamics ¹ SUPERVISORS: Gabriele Benedetti , Peter Albers
2017 - 2020	Master of Science in PHYSICS RUPRECHT-KARLS-UNIVERSITÄT HEIDELBERG, Heidelberg (DE) THESIS: Poisson geometry in Evolutionary Game Theory SUPERVISORS: Kurt Roth , Gabriele Benedetti GRADE: 1.1 (Highest grade: 1; Pass: 4)
2012 - 2016	Bachelor of Science in ASTRONOMY UNIVERSITY OF PADOVA, Padova (IT) THESIS: Quantum Vacuum SUPERVISOR: Armando-Francesco Borghesani GRADE: 110 cum laude (Highest grade: 110 cum laude; Pass: 66)

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AFFILIATIONS

- Nov. 2022 - present | Member of [POLARIS](#) - Joint research project INRIA and CNRS, Grenoble INP, UGA
- Sep. 2020 - Mar. 2022 | Young Researcher in the [Heidelberg STRUCTURES Excellence Cluster](#)
- Sep. 2020 - Mar. 2022 | Member of the [Research Station Geometry & Dynamics](#)
- Sep. 2020 - Mar. 2022 | Member of the [RTG 2229 "Asymptotic Invariants and Limits of Groups and Space"](#)

PUBLICATIONS

- 2024 | ["No-regret Learning in Harmonic Games: Extrapolation in the Face of Conflicting Interests"](#)
In proceedings
D. Legacci, P. Mertikopoulos, B. S. R. Pradelski
- 2024 | ["A Geometric Decomposition of Finite Games: Convergence vs. Recurrence under Exponential Weights"](#)
ICML 2024 Spotlight paper
D. Legacci, P. Mertikopoulos, B. S. R. Pradelski

SELECTED TALKS

- Jun. 2024 | WORKSHOP ON LEARNING IN GAMES
Institut de mathématiques de Toulouse
Regularized Learning in Harmonic Games
- Jun. 2024 | POLARIS SEMINAR
Université Grenoble Alpes
Learning in Games with Conflicting Interests
- May. 2024 | YOUR THESIS IN 180 SECONDS – 2ND PLACE
Université Grenoble Alpes
Learning with Extrapolation in Cyclic Games
- Oct. 2023 | MATHEMATICS AND COMPUTER SCIENCE OF MARKET AND MECHANISM DESIGN
University of California
Recurrence vs Convergence: A Geometric Approach to Learning in Games
- Jun. 2023 | ALPINE GAME THEORY SYMPOSIUM
Université Grenoble Alpes
The Geometry of Game Dynamics
- Feb. 2023 | POLARIS SEMINAR
Université Grenoble Alpes
Hodge Decomposition for Normal Form Games
- Jun. 2021 | SYMPLECTIC GEOMETRY SEMINAR
Ruprecht-Karls-Universität Heidelberg
A Dichotomy for the Generalized Hamiltonian Lotka-Volterra System
- Mar. 2021 | RTG 2229 SEMINAR
Ruprecht-Karls-Universität Heidelberg
Leau-Fatou Flower Theorem

- Dec. 2020 | SYMPLECTIC GEOMETRY SEMINAR
Ruprecht-Karls-Universität Heidelberg
From Normal Form Games to Hamiltonian Evolutionary Dynamics
- Nov. 2020 | STRUCTURES JOUR FIXE
Ruprecht-Karls-Universität Heidelberg
Zero-sum Evolutionary Games and Convex Hamiltonian Systems

TEACHING EXPERIENCE

- S.T. 2021 | T.A. for the lecture DIFFERENTIAL GEOMETRY 1
Ruprecht-Karls-Universität Heidelberg
- S.T. 2021 | T.A. for the seminar GEOMETRIC QUANTIZATION
Ruprecht-Karls-Universität Heidelberg
- S.T. 2019 | T.A. for the lecture GENERAL RELATIVITY
Ruprecht-Karls-Universität Heidelberg