Thomas 'Orlando' Da Costa

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French | 24 years old
Personal Academic Website
Github page

last updated: november 2024

Research Interests

Dynamic Macroeconomics - Biodiversity, Natural Resources and Growth - Inequalities - Uncertainty and Non-Linearities in modeling - Behavioral Economics - Public policies.

Education

2020 – 2025 **École Normale Supérieure de la rue d'Ulm**
École Normale Supérieure (ENS-PSL)
French highest "*Grande École*". Minor in Environmental Sciences, public policy-oriented cursus (economics, political sciences, sociology). Dual degree with AgroParisTech.

2024 – 2025 **M. Sc. in Macroeconomics (External Auditor)**
Paris School of Economics (PSE) & Sorbonne Paris Nord (Paris XIII)
3 courses from the Economic Analysis and Policy M2 program (APE - PSE),
2 courses from the EPOG one (Economic POlicies for the Global transition - Paris XIII).

2023 – 2025 **M.Sc. in Environmental Economics, Spe. Prospective Modeling**
AgroParisTech - Paris-Saclay University (Paris XI)
M1: Summa cum laude (17.15/20 | GPA: $\sim$ 4.0).
Thesis ; Slides.

2021 – 2023 **M.Sc. in Cognitive sciences**
Cognitive Sciences department - ENS-PSL
Magna cum laude (15.23/20 | GPA: $\sim$ 3.6).
M2: Thesis (in French).

2020 – 2021 **Introductory year**
Physics department - ENS-PSL

2017 – 2020 **B.Sc. in Physics**
Sorbonne University (Paris VI)
Summa cum laude (16.31/20 | GPA: $\sim$ 3.8).

2017 – 2020 **B.Sc. in Mechanics**
Sorbonne University (Paris VI)
Summa cum laude (16.40/20 | GPA: $\sim$ 3.8).

2017 **Baccalauréat - Engineering Sciences, Spe. Physics**
Lycée Martin Luther King
Highest honors (18.63/20 | GPA: $\sim$ 3.9), latin and music options.

A list of all the courses I have taken can be found here.

Research Papers

Publications

2024 **TRAVERSéES: Diverse territorial actions and transition pathways for pesticide use,** *Innovations Agronomiques*, 2024, 96, pp.27-39.
with Corinne Robert and many others
Peer-reviewed communication in an open-access journal here.

2024 **Effects of experiencing the COVID-19 pandemic on optimistically biased belief updating,** *eLife* **13**:RP101157
with Iraj Khalid, Orphée Morlaàs, Hugo Bottemanne, Lisa Thonon, Philippe Fossati, Liane Schmidt
Reviewed preprint here.

Publications (Work in progress)

2024 **What carbon price for a net-zero transition by 2050? Insights from the NICE model under different policy regimes at national and international levels** (Provisional title)
with Marc Fleurbaey, Fabrice Murtin
In progress.

2024 **Farming practices and behavioral factors: a case study in eastern France** (Provisional title)
with Elliot Meunier, Corinne Robert
In progress.

Reports and Notes

2023 **How to Design an Effective Composting Program at École Normale Supérieure: An Intervention Proposal**
with Tristin Blatt, Sofya Goldina, Lena Pasalskaya
Report.

Unpublished Manuscripts

2022 **MDMA-assisted psychotherapy in the treatment of PTSD: A Systematic Review and Meta-Analysis**
with Jérémie Beucler, Evangelia Petropoulou, Lakshwin Shreesha
Manuscript.

2020 **Elastocaloric effect applied to cooling systems: theoretical and experimental considerations**
with Jessy Flaharty, Nicolas De Pinho Dias, Gaspard Douin, Marin Bacry
Manuscript (in French).

Research Experience

06/2024 – 09/2024, & 11/2024 – ongoing
Paris School of Economics
with Marc Fleurbaey, CNRS

Climate impacts have been underestimated: a new climate damage function for an optimal climate policy.

Modifying an Integrated Assessment Model (the NICE model, a derivative of Nordhaus' RICE) to incorporate a damage function with a "growth effect" and assessing its effect on the optimal carbon price trajectory and on inequalities.

Macroeconomics, Environmental Economics, Welfare Economics, Modeling.

04/2023 – 09/2023
Georgetown Environmental Justice Program & INRAe
with Pauline Smith & Corinne Robert

Nature Connectedness, Risk Perception and Risk Attitudes: three behavioral factors for a better understanding of pesticide use.

Behavioral Economics, Environmental Psychology and Data Analysis applied to a national public policy (Plan Écophyto).

09/2021 – 05/2022
Paris Brain Institute
with Liane Schmidt

Unrealistic optimism bias in belief updating: effects of confinement during COVID-19 and experimental design.

Studying the suppression of belief updating bias in a stressful environment.

Experimental Psychology, Data Analysis.

06/2019 – 07/2019
Plasma Physics Lab (UMR 7648)
with Matthieu Berthomier, CNRS

caractérisation d'une feuille de graphène pour la spectrométrie de masse ionique à champ de vue 3D dans les plasmas spatiaux.

Modeling the time-of-flight chamber of a mass spectrometer, simulating the trajectory of particles subjected to an electromagnetic field and building an experimental protocol to transfer a graphene sheet (thickness: 30 μm).

Experimental Physics, Data Analysis and Modeling.

Conferences and Seminars

11/2024
Eco-anxiety: paralysis or mobilisation? Psychological, social and political perspectives
Maisons des Ingénieurs Agronomes, Paris
SciencePo Alumni & Uniagro event.

Other Activities

11/2023 – 11/2025
Member of the AgroParisTech Board of Directors — Student Representative
AgroParisTech
"Commission Permanente" and Ethics Unit member, involved in the curriculum reform on themes related to ecological transitions.

01/2023 – 04/2023 **Energy Sobriety Project Assistant**
Heritage department - ENS-PSL
Measurements to optimize heating plant management for future energy audits.

01/2022 – 12/2022 **Presidency and management of marching bands**
Ernestophone / Zizany Brass Band
Administrative and human management: organisation of two international summer tours, participation in film shoots, festivals and other events, online communication, etc. Turnovers of 20,873.89€ (Ernestophone) and 12,000.48€ (Zizany Brass Band), for respectively ∼100 and 12 members.

Miscellaneous

Languages: French (native), English (C1), Spanish (B1), Portuguese (notions).
Computer Literacy: R, Julia, Python, Fortran, LaTeX, QGIS, Adobe Suite (InDesign, Photoshop, Premiere Pro), Microsoft Suite.
Various Interests: Music (Clarinet, Piano, Ukulele, Singing), Sports (Climbing, Hiking, Biking), Hitchhiking.

References available upon request.