Thomas 'Orlando' Da Costa

thomas.da.costa@ens.psl.eu | +33768008746 | 45 rue d'Ulm, 75005, Paris French | 23 years old

Personal Academic Website Github page

last updated: october 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 External Auditor in Macroeconomics courses

Paris School of Economics (PSE) & Sorbonne Paris Nord (Paris XIII)
3 courses from the Analysis and Policy in Economics 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 $(17.15/20 \mid \text{GPA:} \sim 4.0)$.

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: ~ 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 Experience

06/2024 - Paris School of Economics

09/2024 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 - Georgetown Environmental Justice Program & INRAe

09/2023 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 - Paris Brain Institute

05/2022 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 - Plasma Physics Lab (UMR **7648**)

07/2019 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: $30 \ \mu m$).

Experimental Physics, Data Analysis and Modeling.

Research Papers

Publications (Work in progress)

2024 Effects of experiencing the COVID-19 pandemic on optimistically biased belief updating

with Iraj Khalid, Orphée Morlaàs, Hugo Bottemanne, Lisa Thonon, Philippe Fossati, Liane Schmidt

In revision, preprint here.

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).

Other Activities

Member of the AgroParisTech Board of Directors Student Representative 11/2023 -

AgroParisTech11/2025

Commission Permanente and Ethics Unit member, involved in curriculum reform on

themes related to ecological transitions.

01/2023 -Energy Sobriety Project Assistant

04/2023Heritage department - ENS-PSL

Measurements to optimize heating plant management for future energy audits.

01/2022 -Presidency and management of marching bands

12/2022 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.