

DR. TECH. MICHAEL FREIBERGER

Schloßplatz 1 ◊ 2361 Laxenburg
+43 (0)699/11078181 ◊ freiberger@iiasa.ac.at

PERSONAL INFORMATION

Date of birth **December 10th, 1990**
Place of birth **Wels, Austria**
Nationality **Austria**

WORKING EXPERIENCE

International Institute for Applied Systems Analysis (IIASA), Laxenburg *7/2023 - present*
Research Scholar
Economic Frontiers Programme

International Institute for Applied Systems Analysis (IIASA), Laxenburg *5/2021 - 6/2023*
Researcher
Economic Frontiers Programme

Wittgenstein Centre (Vienna Institute of Demography), Vienna *4/2018 - 4/2021*
Projectassistant
FWF-Project "Life-cycle behaviour in the face of large shocks to health"
Supervisor: Dr. Stefan Wrzaczek

TU Wien, Vienna *4/2017 - 3/2018*
Projectassistant (FWF)
Doctoral Programme on Water Resource Systems

TU Wien, Vienna *3/2014 - 6/2014*
Projectassistant
EU-Project "WWWforEurope"

TU Wien, Vienna *8/2011 - 9/2011*
Projectassistant
EU-Project "WWWforEurope"

LKH, Steyr *8/2009 - 4/2010*
Civilianservice in patientstransport

CURRENT REPRESENTATIVE POSITIONS AT IIASA

Capacity Development and Academic Training (CDAT)

Program coordinator and representative

Information and Communication Technologies (ICT)

Committee member

High Performance Computing (HPC)

Committee member

Website Editor EF Program

Public Relations contact EF Program

EDUCATION

TU Wien, Vienna (hons.)

4/2017 - 6/2022

PhD studies in technical mathematics
Supervisor: Alexia Fürnkranz-Prskawetz
Passed with distinction

Stockholm University, Stockholm

8/2015 - 1/2016

Erasmus scholarship

TU Wien, Vienna (hons.)

11/2014 - 3/2017

Master studies Statistics and applied Mathematics in Economics
Passed with distinction

TU Wien, Vienna (hons.)

10/2010 - 11/2014

Bachelor studies Statistics and applied Mathematics in Economics
Passed with distinction

BG/BRG Werndlpark, Steyr (hons.)

2001 - 2009

Matura passed with distinction

TEACHING EXPERIENCE

IIASA, Laxenburg

6/2024 - 8/2024

YSSP Mentor
Mentorship for PhD students during the Young Scientist Summer Program

IIASA, Laxenburg

6/2023 - 8/2023

YSSP Mentor
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IIASA, Laxenburg

6/2022 - 8/2022

YSSP Mentor
Mentorship for PhD students during the Young Scientist Summer Program

TU Wien, Vienna

10/2018 - 1/2019

Lecturer

“Dynamic Macroeconomics” (Exercises)

TU Wien, Vienna

10/2018 - 1/2019

Lecturer

“Principles of Microeconomics” (Exercises)

TU Wien, Vienna

3/2013 - 6/2013

Tutor

“Econometrics for Business Informatics” (Lectures with exercises)

PUBLICATIONS

The inoculation dilemma: Partial vs Full immunization during the early rollout in a pandemic.

Singh, R., Wrzaczek, S., & Freiberger, M. (2025).

Omega 132: e103230.

<https://doi.org/10.1016/j.omega.2024.103230>

Should the COVID-19 lockdown be relaxed or intensified in case a vaccine becomes available?

Buratto A., Muttoni M., Wrzaczek S. & Freiberger M. (2022).

PLOS ONE 17(9): e0273557.

<https://doi.org/10.1371/journal.pone.0273557>

Chasing up and locking down the virus: Optimal pandemic interventions within a network.

Freiberger M., Grass D., Kuhn M., Seidl A. & Wrzaczek S. (2022).

Journal of Public Economic Theory

<https://doi.org/10.1111/jpet.12604>

Quantifying Economic Dependency.

Loichinger E., Hammer B., Prskawetz A., Freiberger M., & Sambt J. (2017).

European Journal of Population, 1-30.

<https://doi.org/10.1007/s10680-016-9405-1>

PUBLISHED SOFTWARE

Two-Stage-Optimal-Control (v0.1.0).

Freiberger, M. (2023).

Zenodo.

<https://doi.org/10.5281/zenodo.7772076>

WORKING PAPER

Optimization in age-structured dynamic economic models.

Freiberger, M., Kuhn, M., Fürnkranz-Prskawetz, A., Sanchez-Romero, M. & Wrzaczek, S. (2024).

IIASA Working Paper. Laxenburg, Austria: WP-24-004

<https://pure.iiasa.ac.at/19549>

Should I stay or should I go: Modelling disaster risk behaviour using a dynamic household level approach.

Freiberger, M., Hoffmann, R. & Fürnkranz-Prskawetz, A. (2024).

IIASA Working Paper. Laxenburg, Austria: WP-24-010

<https://pure.iiasa.ac.at/19725>

Modelling health shocks

Freiberger M., Kuhn M. & Wrzaczek S. (2023).
IIASA Working Paper. Laxenburg, Austria: WP-23-002
<https://pure.iiasa.ac.at/id/eprint/18581/>

CONFERENCE PRESENTATIONS

2023, EEA-ESEM congress (Barcelona, Spain), EAERE summer school (Seggau, Austria), Viennese Vintage Workshop (Laxenburg, Austria)

2022, EURO (The Association of European Operational Research Societies) Annual Conference (Helsinki, Finland), Viennese Conference on Optimal Control and Dynamic Games (Vienna, Austria), Wittgenstein Centre Conference 2022 (Vienna, Austria)

2020, ATHEA (Austrian Health Economics Association) Yearly Conference (Vienna, Austria), EAERE (European Association of Environmental and Resource Economists) Annual Conference (virtual), EEA (European Economic Association) Annual Conference (virtual), ORAHS (OR Applied to Health Services) Annual Conference (virtual)

2019, ATHEA (Austrian Health Economics Association) Annual Conference (Vienna, Austria), DGGÖ (German Health Economics Association) Annual Meeting (Augsburg, Germany), EURO (The Association of European Operational Research Societies) Annual Conference (Dublin, Ireland)

2018, EURO (The Association of European Operational Research Societies) Annual Conference (Valencia, Spain), EGU (European Geosciences Union) General Assembly (Vienna, Austria), NOeG (National Economic Society Austria) Annual Conference (Vienna, Austria), Understanding Risks Balkan (Belgrad, Serbia), MWA (Moscow Winter Academy) Workshop on age-structured modelling (Moscow, Russia)

LANGUAGE ABILITIES

German	Native language
English	Fluent written and spoken
French	Basics
Latin	Basics

TECHNICAL SKILLS

GitHub Profile	https://github.com/michaelfreiberger
Programming	Matlab, Julia, GAMS, R, Stata, LaTeX, C, C++
Office Programs	Word, Excel, PowerPoint

OTHER INFORMATION

League scheduling Scheduling of all Austrian flagfootball leagues	<i>3/2017 - present</i>
Club chairman Chairman and Quarterback of Honeybees Flagfootball (playing in the first division of the Austrian flagfootball league)	<i>1/2016 - 1/2025</i>
FLA2-League manager League-manager of the second division in the Austrian flagfootball league	<i>9/2017 - 11/2018</i>