

CONTACT

Phone: +49 341 235 1743

E-Mail: christian.klassert@ufz.de

Website: Website

Social media:

RESEARCH FOCUS

- Environmental and resources economics, management, and policy
- Spatial integrated assessment modeling, hydro-economic analyses, and econometrics
- Multi-sector dynamics, unequal urban water access, and agricultural drought adaptation

LANGUAGES

German (native)
English (fluent)

SOFTWARE SKILLS

Python, GitHub, R (statistics), ArcGIS, QGIS

Working Group Leader at the Helmholtz Centre for Environmental Research (UFZ)

Dr. Christian J.A. Klassert

Christian Klassert leads the Working Group "Integrated Hydro-Economic Modeling" (IHEM) and the BMFTR Junior Research Group "navigate" at the Helmholtz Centre for Environmental Research (UFZ) in Leipzig, Germany and is elected chair of the European Geosciences Union (EGU) Subdivision on "Water and Society".

His work combines conceptual analyses, large-scale hydro-economic models, econometrics, and transdisciplinary scenario development to analyze sustainable regional development under water scarcity in Jordan, India, and Germany. His results have been published in *Nature Sustainability, PNAS, Earth's Future,* and other journals. Christian is the co-recipient of the 2022 UFZ Research Award and has been shortlisted for the 2026 Joachim Herz Award.

ACADEMIC DEGREE

PhD in Economics, Leipzig University, thesis: "The Value of Decentralized Private Water Service Provision in Intermittent Water Supply Systems: Coupled Hydro-Economic System Analyses of Formal and Informal Water Markets in Jordan" (grade: *summa cum laude,* 1.0) — 2021

European Master in Law and Economics and LL.M., jointly awarded by the Universities of Hamburg, Germany, Ghent, Belgium, and Haifa, Israel ("with great distinction") — 2009

German academic law degree (Erstes Staatsexamen), Johannes Gutenberg University Mainz, Germany (ranked 2nd best in state-wide final examination) — 2008

HONORS & AWARDS

Shortlist Nominee of the Joachim Herz Award on the "Smart Use of Water" for the topic "Revealing the Economic Value of Water", Joachim Herz Foundation, Hamburg, Germany — 2026

UFZ Research Award for coupled hydro-economic modeling of water security, awarded to Christian Klassert, Erik Gawel, Bernd Klauer, Katja Sigel, UFZ, Leipzig, Germany — 2022

KSB Foundation Postdoctoral Scholarship awarded by the DAAD Foundation for coupled human-natural systems modeling of water security at the Department of Earth System Science, Stanford University, Stanford, CA — 2022

PROFESSIONAL APPOINTMENTS

Working Group Leader for "Integrated hydro-economic modeling" and Joint Lead of BMFTR Junior Research Group "navigate", Department of Economics, Helmholtz Centre for Environmental Research (UFZ), Leipzig, Germany — Since 01/2026

Postdoctoral Researcher, Department of Economics, UFZ — 09/2021 – 12/2025

Visiting Postdoctoral Scholar, Department of Earth System Science (Prof. Dr. Steven Gorelick), Doerr School of Sustainability, Stanford University — 10/2022 – 03/2023

Research Associate, Department of Economics, UFZ — 02/2017 – 08/2021

Researcher, Chair of Economics, especially Institutional Environmental Economics (Prof. Dr. Gawel), Leipzig University — 02/2014 – 01/2017

Research Assistant, Department of Bioenergy, UFZ — 03/2011 – 01/2014

ACADEMIC ROLES

Elected Chair of EGU Subdivision Hydrological Sciences 5 on "Water and Society", European Geosciences Union (EGU) https://www.egu.eu/hs/about/subdivisions/water-and-society/ — 2025 – 2029

Co-chair of the Human Systems Modeling Working Group (Chair: Jim Yoon) in the MultiSector Dynamics Community of Practice https://multisectordynamics.org/human-systems-modeling/ — Since 2024

Co-speaker of the Social Science Water Research Working Group (Co-Speaker: Mariana de Brito) at the UFZ https://www.ufz.de/index.php?en=36384 — Since 2023

Co-convener of Sessions at the American Geophysical Union (AGU) Fall Meetings	2020 / 2021 / 2023 / 2025
Co-convener of Sessions at the European Geosciences Union (EGU) General Assembly	2023 / 2024
Invited talks at the Aspen Global Change Institute (AGCI) Aspen, CO;	2025
American Geophysical Union (AGU) Fall Meeting, New Orleans, LA;	2025
International Socio-Hydrology Conference (ISHC), Tokyo, Japan;	2025
Advances in Water Management and Climate Adaptation (AWMCA) Lecture Series, TU Berlin; etc.	2025
Organization of project meetings at the Helmholtz Centre for Environmental Research for the projects FUSE (2019, 2022) and the Jordan Water Project (2015, 2017)	2015 - 2022
Media outreach: BBC World Service "Newshour" radio interview (22 Oct 2022), Tagesspiegel newspaper report (25 January, 2022), HR "Alle Wetter" local television interview (12 April 2021)	Since 2021
Journal Reviewer for Nature, Nature Water, Earth's Future, Water Resources Research, Water Economics and Policy, Journal of Environmental Management, Agricultural Water Management, Water Resources and Economics, Natural Hazards, etc.	Since 2016

PROJECTS

BMFTR Junior Research Group **"[navigate] – Water-sensitive rural-urban development for resilience in scarcity crises"** (budget: 3.1 million Euro), role: joint lead with T. Carvalho	2025 – 2030
Helmholtz Water Security Campaign **"Solution Lab Rur-Erft",** role: PI of Subproject 3	2026 – 2028
Helmholtz InnoPool Project **"D-TWINS – Digital Twin for Critical Zone",** role: UFZ-PI	2025 – 2028

UFZ cooperation project with the Thuringian Environmental Ministry (TMUEN) on the **Thuringian Low Water and Drought Strategy**, role: researcher, proposal co-author	2023 – 2026
Belmont Forum project **"Food Water Energy for Urban Sustainable Environments (FUSE)"**, role: researcher, proposal co-author, https://fuse.stanford.edu/	2018 – 2022
Future Earth project **"NexusFootprint"**, role: researcher, proposal co-author	2020 – 2021
Volkswagen Foundation AI4EO project **"SmartSlum"**, role: researcher, proposal co-author	2019 – 2020
German Ministry for the Environment Export Initiative Project **"Jordan Water Project – Capacity Building (JordanCAP)"**, role: instructor, proposal co-author	2017 – 2019
Belmont Forum project **"Integrated Analysis of Freshwater Resources Sustainability in Jordan (Jordan Water Project, JWP)"**, role: researcher, https://jordan.stanford.edu/	2014 – 2016

CO-SUPERVISOR

*(only PhD candidates listed; *authorization act as first supervisor at Leipzig U.)*

Susanne Flinner, BMFTR Junior Research Group [navigate], roles: first supervisor, proposal co-author*	2026 – 2030
Maximilian Föhl, BMFTR Junior Research Group [navigate], roles: first supervisor, proposal co-author*	2026 – 2030
Simon Werner, UFZ-TMUEN cooperation project, roles: first supervisor, proposal co-author*	2023 – 2026
Jasmin Heilemann, UFZ Graduate School "Thirsty Cities: Pathways for Water-Resilient Urban Transformation and Agricultural Adaptation", roles: co-supervisor, proposal co-author	2021 – 2026
Mansi Nagpal, UFZ Graduate School "AGRI-TRANSFORM: Leverage Points for the Transformation to an Environmentally Sustainable Agriculture", roles: co-supervisor, proposal co-author	2019 – 2025

TEACHING EXPERIENCE

Guest Lecturer for **(1) Transformation Economics** (lecture, 2 h/week in winter, since 2024), **(2) Water Resources Management** (seminar, 2 h/week in summer, since 2023), Faculty of Economics, Leipzig University — Since 2023

CoMSES Net International Winter School on Agent-Based Modeling of Social-Ecological Systems, 4 – 15 January 2021, virtual course on hydro-economic agent-based models — January 2021

Jordan Water Project – Capacity Building Program (JordanCap), 2018 – 2019, four two-week block courses instructing eight experts of the Jordanian Ministry for Water and Irrigation in economic theory, statistical analyses, and the use of a hydro-economic model — 2018 - 2019

SELECTED PUBLICATIONS

(Total citations: 2069; h-Index: 16)

Klassert, C., Yoon, J., Sigel, K., et al. (2023). Unexpected growth of an illegal water market. *Nature Sustainability* 6, 1406–1417. DOI: 10.1038/s41893-023-01177-7

Skerker, J., **Klassert, C.**, Francois, B., et al. (2026). Urban water affordability crisis exacerbated by climate change. *Nature Sustainability*, 1-12. DOI: 10.1038/s41893-026-01890-z

Heilemann, J., Nagpal, M., … & **Klassert, C.** (2025). Scenario projections of future irrigation water demand for field crops in Germany considering farmers' adaptive land use. *Agric. Water Manag.*, *318*, 109699. DOI: 10.1016/j.agwat.2025.109699

Nagpal, M., … & **Klassert, C.** (2025): Measuring extremes-driven direct biophysical impacts in agricultural drought damages, *Natural Hazards and Earth System Sciences* 25, 2115–2135. DOI: 10.5194/nhess-25-2115-2025

Zhu, Y., Gawel, E., Klauer, B., & **Klassert, C.** (2024). Impacts of intermittent water supply on household electricity demand: An econometric analysis for the Pune Metropolitan Region, India. *Water Resources and Economics,* 48, 100250. DOI: https://doi.org/10.1016/j.wre.2024.100250

Yoon, J., **Klassert, C.**, Selby, P., et al. (2021). Coupled human-natural system analysis of freshwater security under climate and population change. *PNAS,* 118(14): e2020431118. DOI: 10.1073/pnas.2020431118

Klassert, C., Sigel, K., Klauer, B., & Gawel, E. (2018). Increasing Block Tariffs in an Arid Developing Country: A Discrete/Continuous Choice Model of Residential Water Demand in Jordan. Water 10: 248. DOI: 10.3390/w10030248

Klassert, C., Gawel, E., Sigel, K., & Klauer, B. (2017). Sustainable transformation of urban water infrastructure in Amman, Jordan: Meeting residential water demand in the face of deficient public supply and alternative private water markets. In: S. Kabisch, F. Koch, E. Gawel, et al. (Hrsg.): *Urban Transformations: Sustainable urban development towards resource efficiency, quality of life and resilience.* Springer: Cham: 93-116. DOI: 10.1007/978-3-319-59324-1_6

Further publications available at: Google Scholar