

# RESEARCH & TEACHING

*My plan for joining Geo@UZH*

**LEVI JOHN WOLF**

**CITIES & CAUSAL INFERENCE**

**PEOPLE, POLITICS, *DEMOS***

**SPECIES & OCEANS**

**SOCIAL+TECH INFRASTRUCTURE**

*Current areas of activity*

# CITIES & CAUSAL INFERENCE

Geography  
Compass

AUG  
2024



**Confounded Local Inference:  
Extending Local Moran Stats  
to Handle Confounding**

Levi John Wolf  
March 2024

*Rethinking Causality in  
Quantitative Human Geography*

Mirah Zhang

Levi John Wolf

*Causal Inference and Spatial Analysis*

Levi John Wolf & Nicholas Dorward

*due to SAGE Fall of 2025 for spring 2026*

*[spatialcausal.org](http://spatialcausal.org)*

**Keynote GIS Research UK '24**

**Dagstuhl '24**

**Turing Theory & Methods**

**Challenge Fortnight '24**

*Current areas of activity*

# PEOPLE, POLITICS, DEMOS



*What makes a place 'urban'?*

Sean Fox & Levi John Wolf

MAY  
2024

*Internet adoption & productivity:*

*Causal effects of internet speed in the UK*



Emmanouil Tranos, Anastasios Kitsos, Levi John Wolf

NOV  
2024



*Do neighborhood level rent regulations work? A causal analysis of Special Licensing Areas*

Levi John Wolf & Alex Marsh

AUG  
2025

*Current areas of activity*

# SPECIES & OCEANS

NERC Reference : NE/X001261/1

**CoccoTrait: Revealing Coccolithophore Trait diversity and its climatic impacts**

**Principal Investigator:** [Dr FM Monteiro](#), University of Bristol, Geographical Sciences

**Co-Investigator:** [Dr LJ Wolf](#), University of Bristol, Geographical Sciences

**Co-Investigator:** [Professor A Poulton](#), Heriot-Watt University, Sch of Energy, Geosci, Infrast & Society

**Grant held at:** [University of Bristol](#), [Geographical Sciences](#)

AUG  
2026

## Probabilistic Programming for Ocean Digital Twins

### A new infrastructure for tunable aquatic ecosystem models

Joost de Vries, Fanny Monteiro, Levi John Wolf, and Chris Follet

The Alan Turing Institute

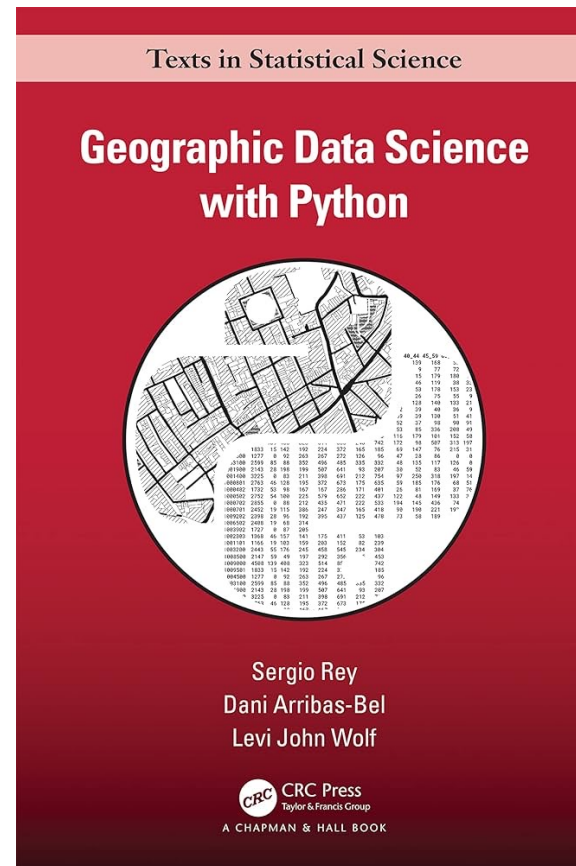
OCT  
2027

*Current areas of activity*

# WORKSHOPS

GeoPython (Basel 2024)  
AGILE (Glasgow 2024)  
SciPy Devs (Seattle 2024)

Organizing GISRUK 2025



README MIT license

## Introduction to Spatial Optimisation

launch binder

Levi John Wolf

**Landscape Geoinformatics**  
@LGeoInformatics

Follow ...

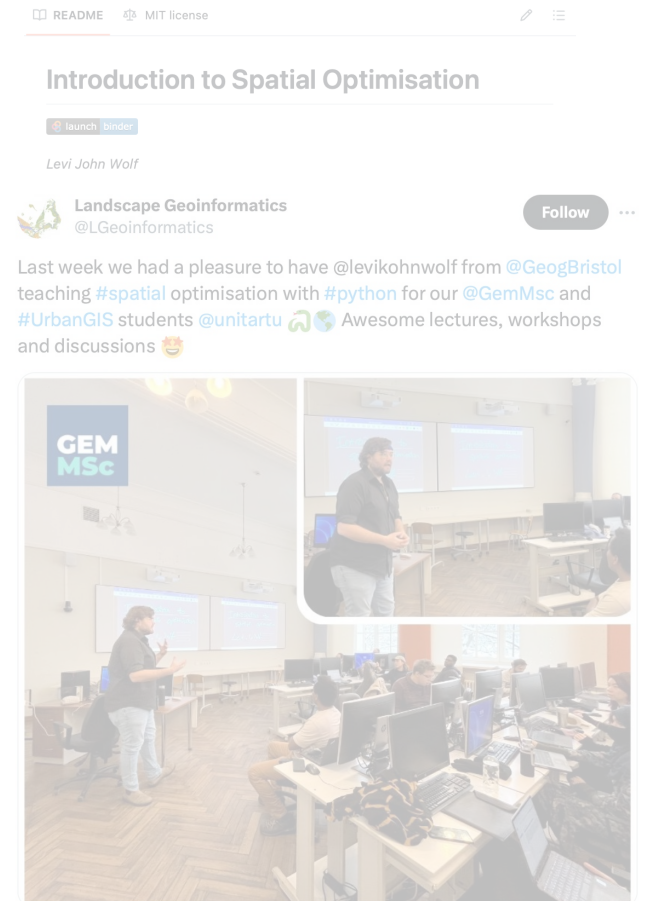
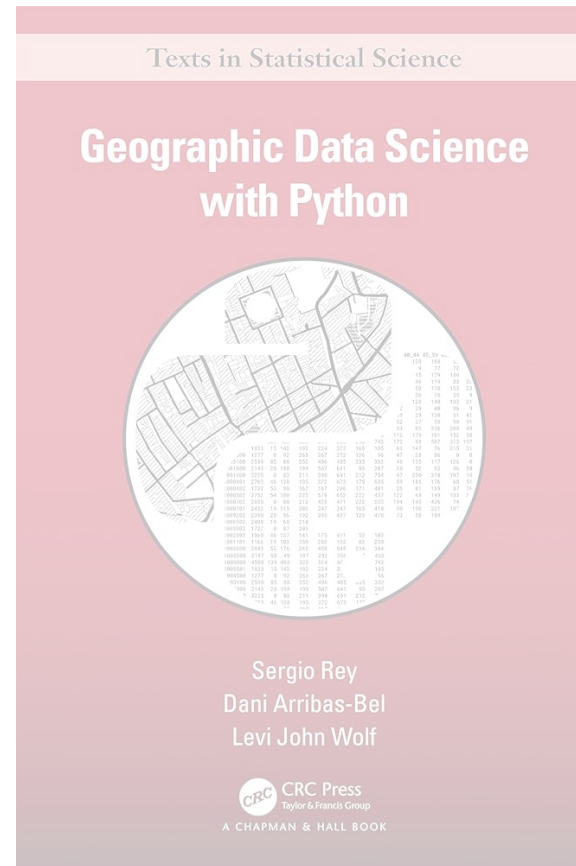
Last week we had a pleasure to have @levikohnwolf from @GeogBristol teaching #spatial optimisation with #python for our @GemMsc and #UrbanGIS students @unitartu 🌍📚 Awesome lectures, workshops and discussions 😊

*Current research-driven pedagogy*

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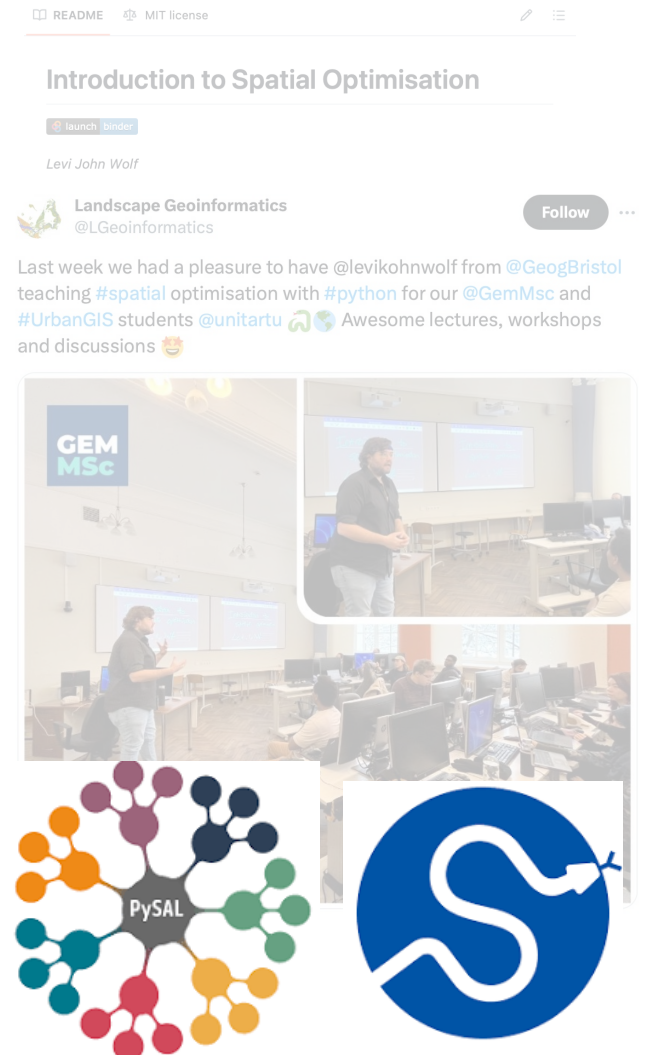
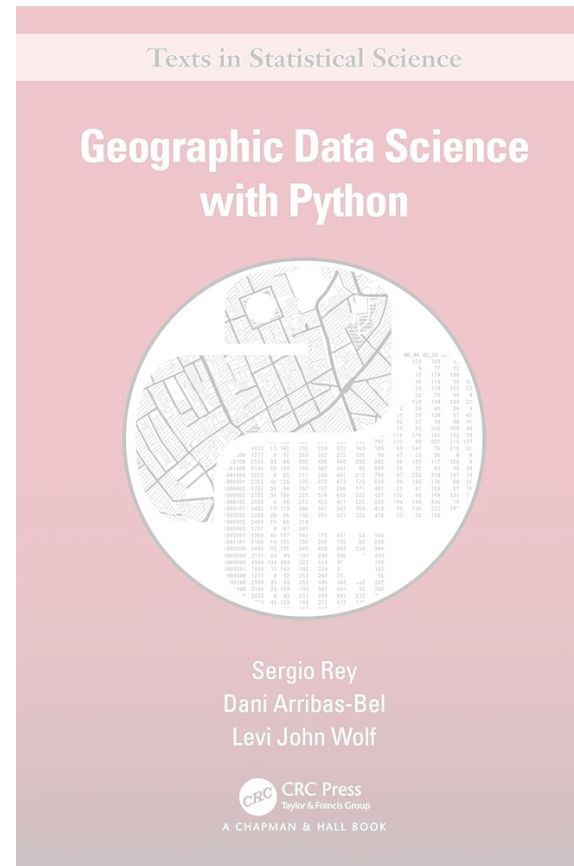
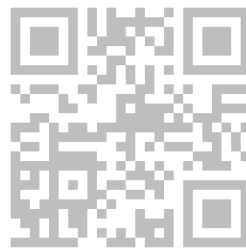
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YOUR SPATIAL FIX



*Current research-driven of pedagogy*



## **AY2024**

(re)Locate, listen, learn!

## **AY2025**

“Starting” Clnf grant (SNSF SPIRIT) w/ Delft & Maynooth  
Finish *Causal Inference in Spatial Analysis* at SAGE

## **AY2026**

Work as partner for ERC Horizon-based follow-on for  
CoccoTrait, likely “Protect & Restore Ecologies”

## **AY2027**

Anchor Horizon bid (likely Innovation or Policy & Place)

## **AY2028**

Additional META or Alphabet funding for ML & optimization  
for future cities

*Five-year research transition plan*

# **DIRECT TEACHING EXPERIENCE**

Stats for Geographers (Y1-Y3)

Geographic Data Science (Y3)\*

Machine Learning for Geographers (MSc)\*

Key Concepts in Geography (Y1)

Ethnicity, Class, & Housing (Y3)

Dissertation Supervision (Y3, MSc)\*

## **TEACHING ADMIN**

School Postgraduate Exams Officer

Science Faculty Academic Integrity\*

*Where I fit in the University of Zurich teaching*

# **WHERE I ADD DEPTH**

GIScience (GEO317, 372, 875, 879)

Statistics (GEO246, 870, 872, 876, 877, 881)

# **NEW COURSE IDEAS**

**Microfoundations of city science**

*Location theory, spatial opt, scaling, open data*

**Causal inference for spatial policy & planning**

*CI & Program evaluation for urban planning*

**Who counts? An intro to electoral geography**

*Voting theory, elections, & fairness stats*

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# MY RESEARCH VISION

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