

P: Scientific Methods and Writing

856.111 / 651.902

Stefan LANG & Hannah Augustin



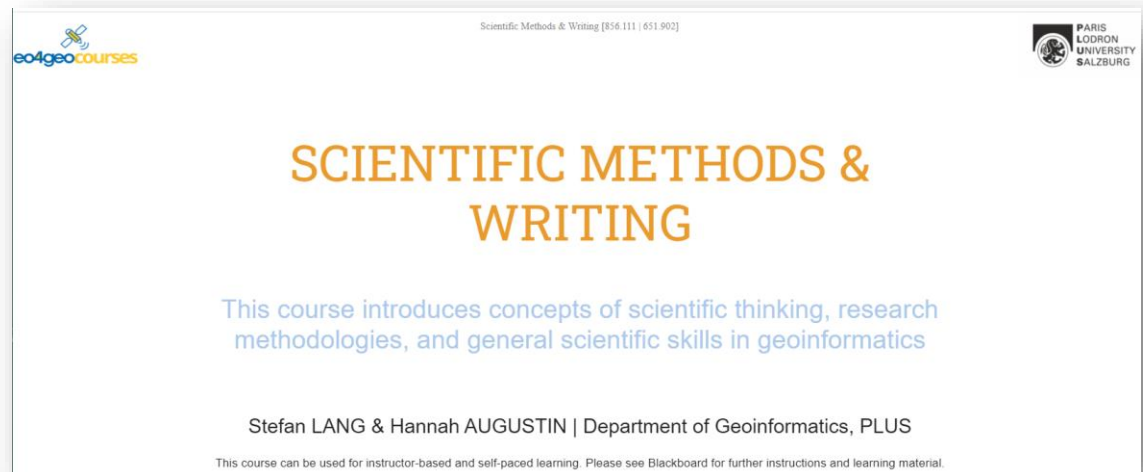
University of Salzburg PLUS
Department of Geoinformatics – Z_GIS

Introduction

Lesson 1

For organisational issues please see

https://eo4geocourses.github.io/PLUS_SciWri/



The slide is a white rectangular box with a thin blue border. In the top left corner is the 'eo4geocourses' logo, which consists of a stylized blue and yellow icon followed by the text 'eo4geocourses'. In the top right corner is the Paris Lodron University Salzburg logo, which is a black square containing a white circular emblem with a tree, and the text 'PARIS LODRON UNIVERSITY SALZBURG' to its right. Below the logos, the title 'SCIENTIFIC METHODS & WRITING' is centered in a large, bold, orange font. Underneath the title, a blue line of text reads: 'This course introduces concepts of scientific thinking, research methodologies, and general scientific skills in geoinformatics'. At the bottom of the slide, the text 'Stefan LANG & Hannah AUGUSTIN | Department of Geoinformatics, PLUS' is centered. Below this, in a smaller font, is the text: 'This course can be used for instructor-based and self-paced learning. Please see Blackboard for further instructions and learning material.'

Scientific Methods & Writing [856.111 | 651.902]

SCIENTIFIC METHODS & WRITING

This course introduces concepts of scientific thinking, research methodologies, and general scientific skills in geoinformatics

Stefan LANG & Hannah AUGUSTIN | Department of Geoinformatics, PLUS

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Scientists must write

- *Why? ✎ Note down 3 reasons why scientists must write! Your own thoughts ...?*
- Science **progresses** through (written) communication
- **Scientific dissemination** is a crucial step **to promote** any research activities
- The society / the public **finances science** and wants to be **informed**
- You can only **change something** if you **talk or write about** what you are doing!

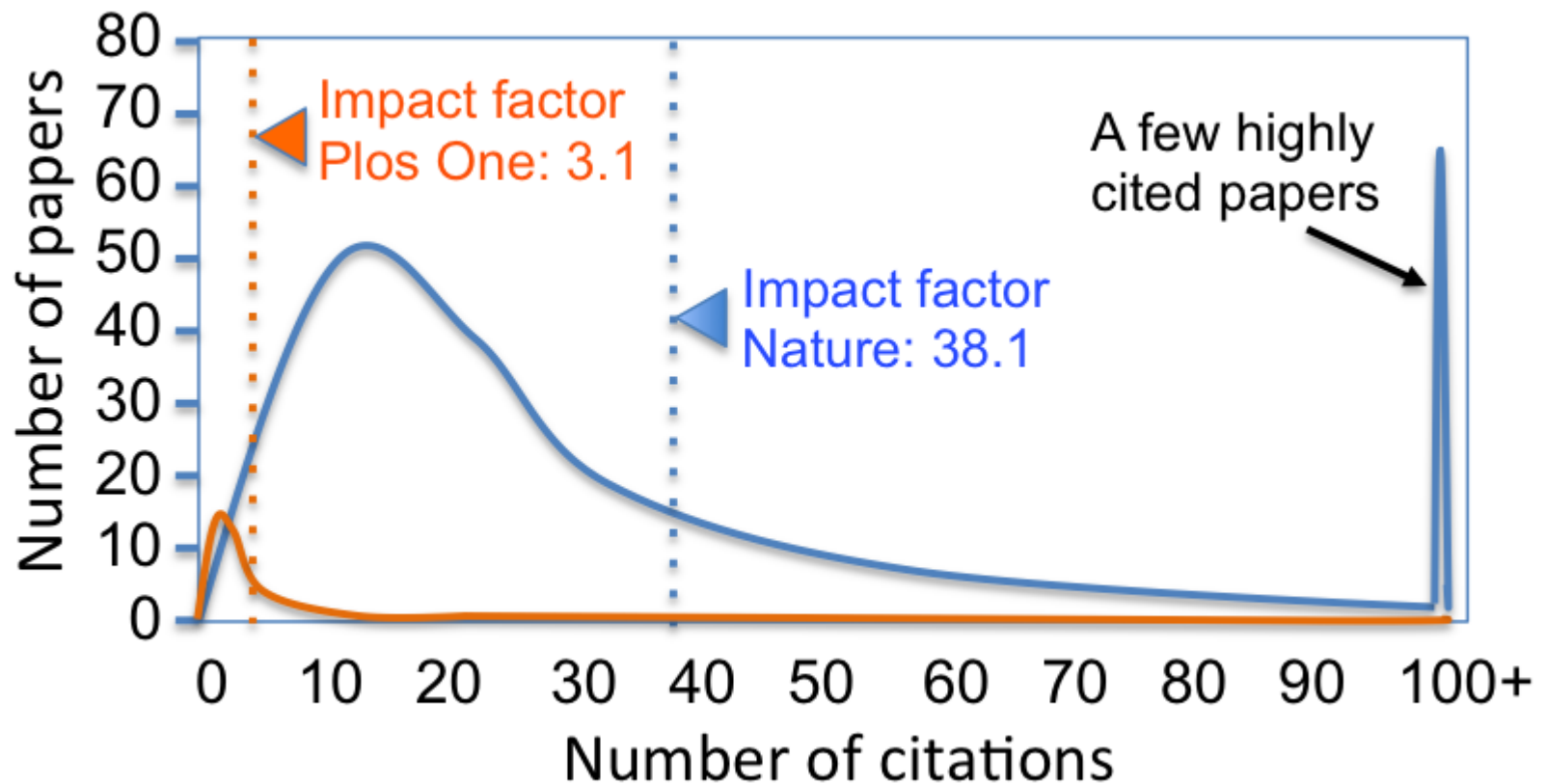


Scientific dissemination

- Dissemination
 - ‘**Classical**’ means of scientific dissemination: **scientific publication**
 - Other means of publication, **new media** (blog, twitter, movies, etc.), see e.g. www.cophub-ac.eu
 - **Currency** of science, ‘**value**’ depending on journals’ impact
 - New ways of dissemination, Researcher Night, Open House, etc.



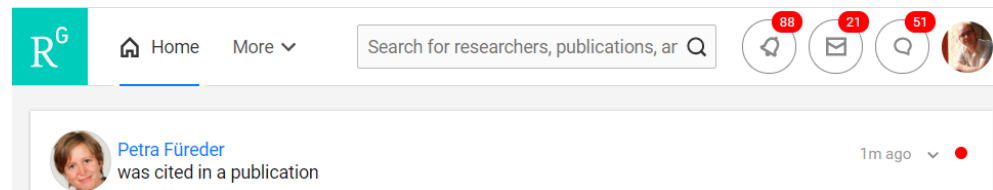
Journal impact factor



New media ...

- Scientific social media groups

- Research gate
- Linked in groups
- Facebook etc.



- Pre-publication platforms

- e.g. Research Gate, arXiv.org
- E-print archives for highly dynamic research fields
- Rapid communication of results (e.g. Corona immunology research)



Scientists must write ... and talk!

- Both writing (W) and talking (T) is key for science
 - Some say: “Science = **W**”, “Teaching = **T**”
 - Some feel more comfortable in writing, others in talking
 - Good (=effective) science = **W & T** [science \neq *silence*!]
 - **W** is good for documenting, **T** for selling and communicating → both required for **scientific dissemination** (e.g. EO4GEO project)



GI Forum / AGIT



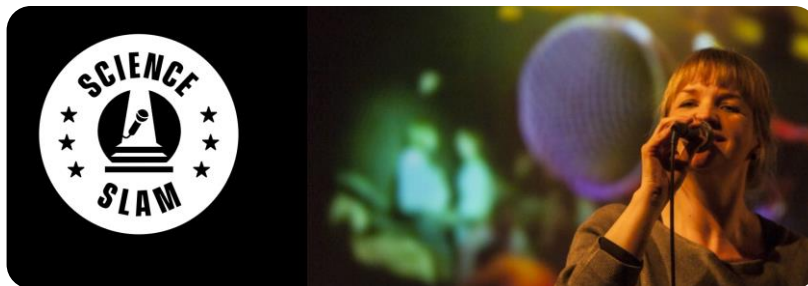
GEOBIA conference



EARSel Symposium

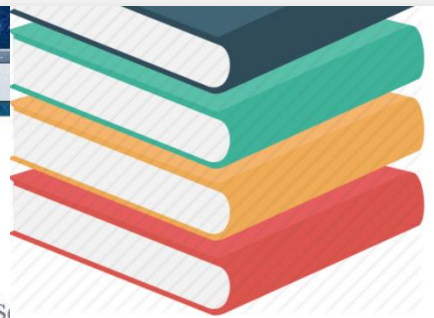
New forms of talking ...

- Scientist should get exposed to a public audience
- Make scientific outcome received / receivable by lay people
- Science Slam or Ted Talk like formats increasingly popular



Scientists must read, too ...

- Joint Library Material Sciences Building Itzling
 - See <https://msc-agi.zgis.at>



>>> Extended Library Hours @Itzling

Good news: the university library at Itzling (Jakob Haringer Straße 2a) from September 1st, 2022 onwards has extended its opening hours: **Mon 9am-5pm, Tue-Thu 10am-4pm and Fri 9am-1pm.**

‘Our’ local branch of the university library not only holds significant parts of the Geoinformatics book & journals collection, but perhaps more importantly offers work stations and spaces for group as well as individual work. Check it out – this is an important part of making Itzling ‘Science City’ / Techno-Z an attractive location for student life.



Dissemination (cont.)

- Communication (,2-way‘)
 - different strategies addressing various target audiences (stakeholders, commercial, public)
- Reports
 - e.g. Z_GIS Annual Report
- News items, blogs, tweets ...
 - Various Z_GIS news feeds and channels
 - Blog for this course tbd.



GISCIENCE BLOG

ASEA Uninet Workshop in Ho Chi Minh City ...



The Interfaculty Department of Geoinformatics - Z_GIS implemented a week-long Interdisciplinary Facu [...]

Erasmus+ EMJMD successfully launched

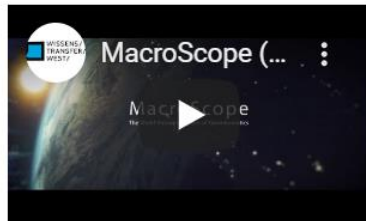


The new Erasmus Mundus Joint Master Degree (EMJMD) programme funded under the Erasmus+ scheme has be [...]



Dissemination (cont.)

- Videos (<https://zgis.at/videos-2/>)



After all ... it's not only about publishing (or presenting)
Be creative!

