ETH zürich

ETH Library

Coffee Lectures

ResearchRabbit

Explore literature via citation networks

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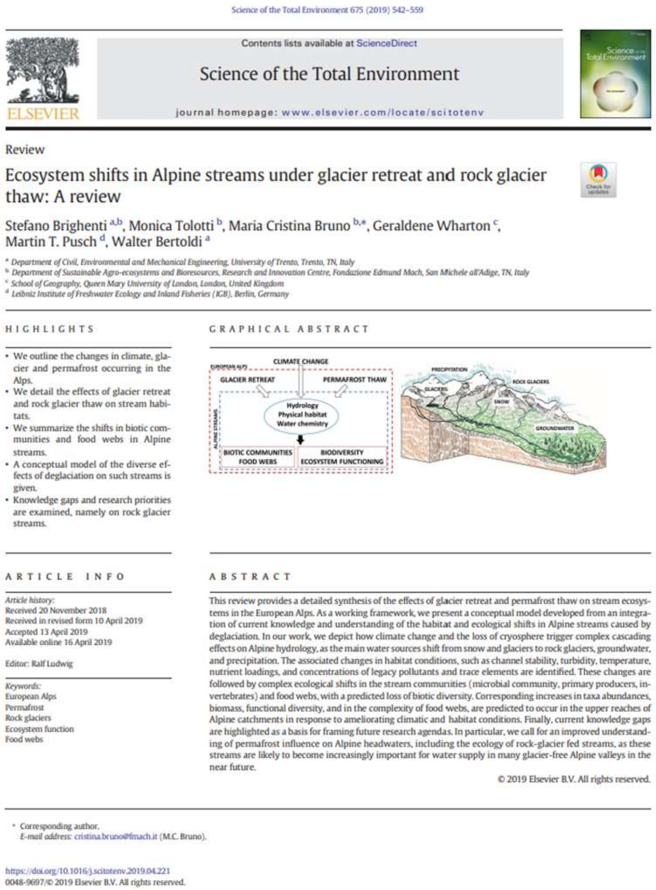
13 March 2024

New knowlegde in 10 minutes:

- Searching via networks, how does it work?
  - Anatomy of a paper
  - Types of networks
- ResearchRabbit Demo
- Recommendations

Anatomy of a scientific paper

Anatomy of a scientific paper



Science of the Total Environment 675 (2019) 542–559

Contents lists available at ScienceDirect

Science of the Total Environment

journal homepage: www.elsevier.com/locate/scitotenv

Review

Ecosystem shifts in Alpine streams under glacier retreat and rock glacier thaw: A review

Stefano Brighenti [a,b], Monica Tolotti [b], Maria Cristina Bruno [b,*], Geraldene Wharton [c], Martin T. Pusch [d], Walter Bertoldi [a]

HIGHLIGHTS

- We outline the changes in climate, glacier and permafrost occurring in the Alps.
- We detail the effects of glacier retreat and rock glacier thaw on stream habitats.
- We summarize the shifts in biotic communities and food webs in Alpine streams.
- A conceptual model of the diverse effects of deglaciation on such streams is given.
- Knowledge gaps and research priorities are examined, namely on rock glacier streams.

GRAPHICAL ABSTRACT

ARTICLE INFO

Keywords: European Alps, Permafrost, Rock glaciers, Ecosystem function, Food webs

ABSTRACT

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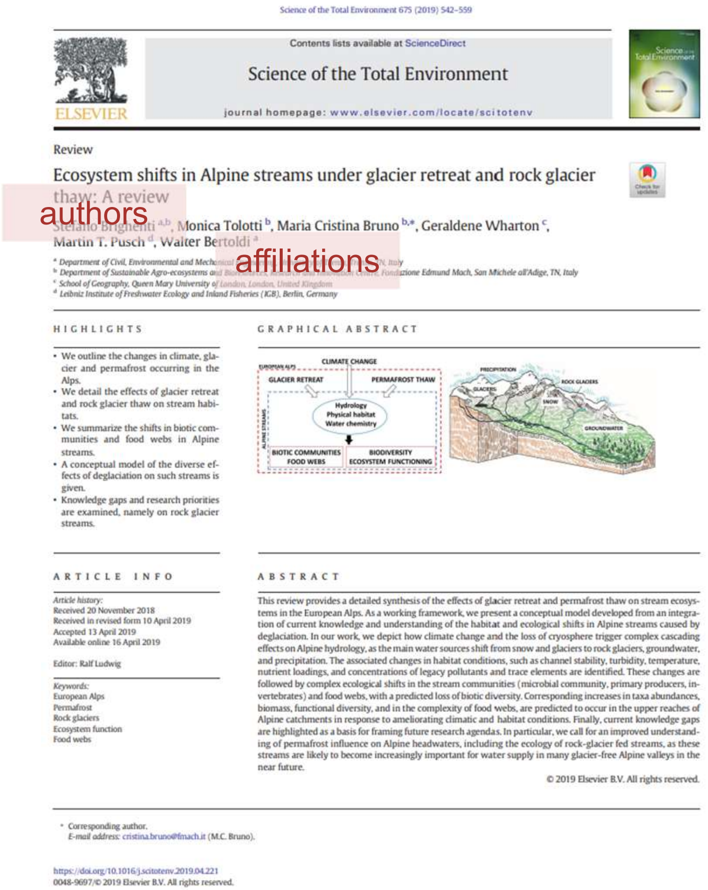
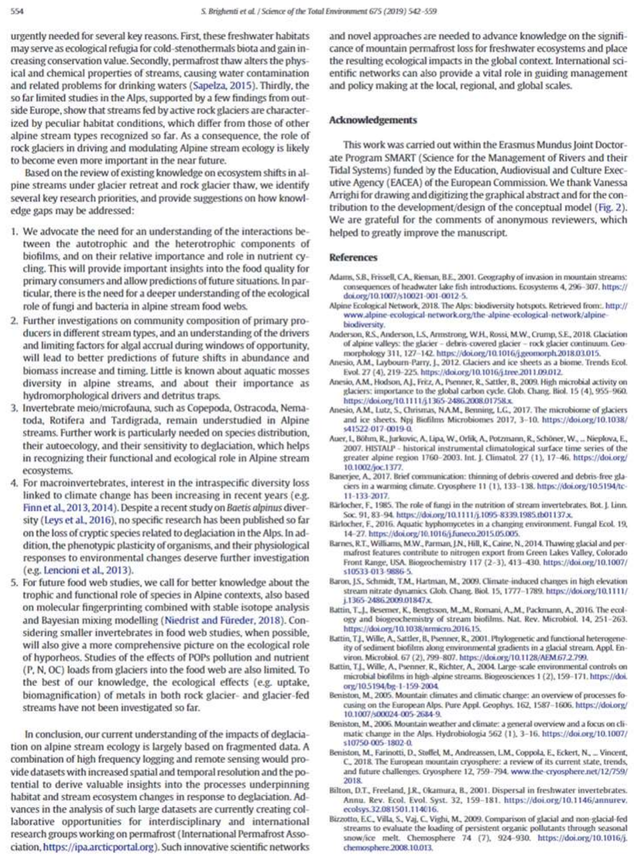
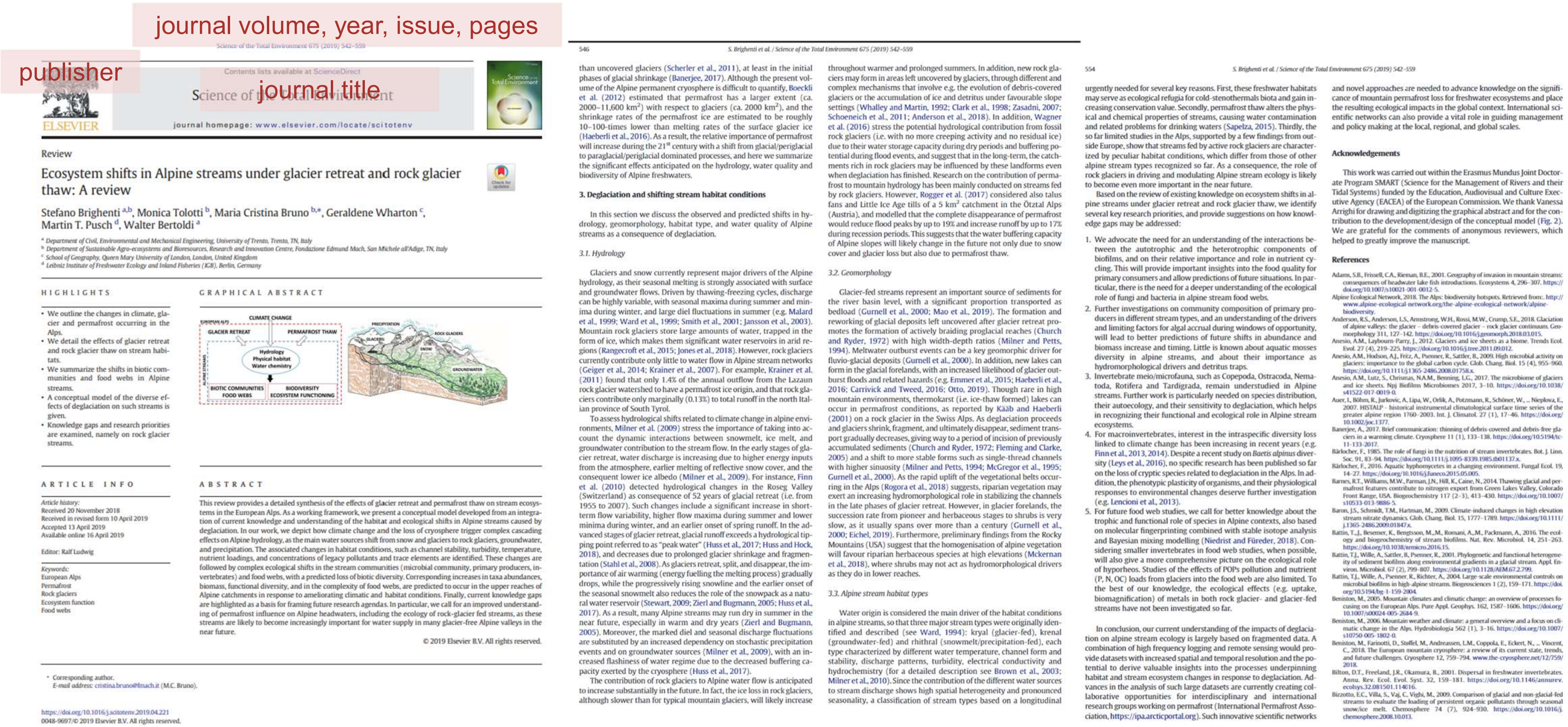
Anatomy of a scientific paper: Descriptive metadata – what about?

Anatomy of a scientific paper: Descriptive metadata – by whom?





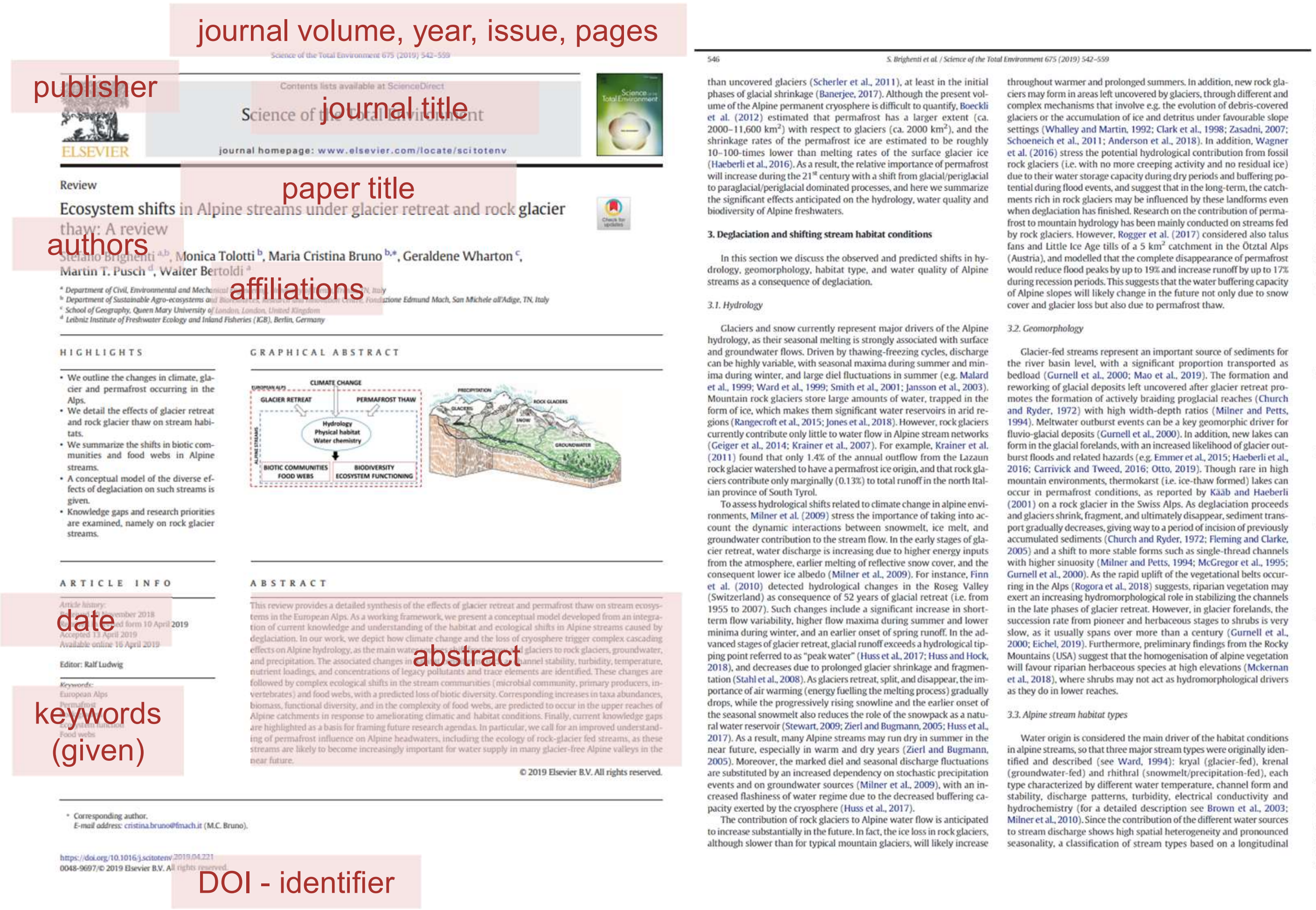
Anatomy of a scientific paper: Descriptive metadata – journal information



Anatomy of a scientific paper: Descriptive metadata - Identifier

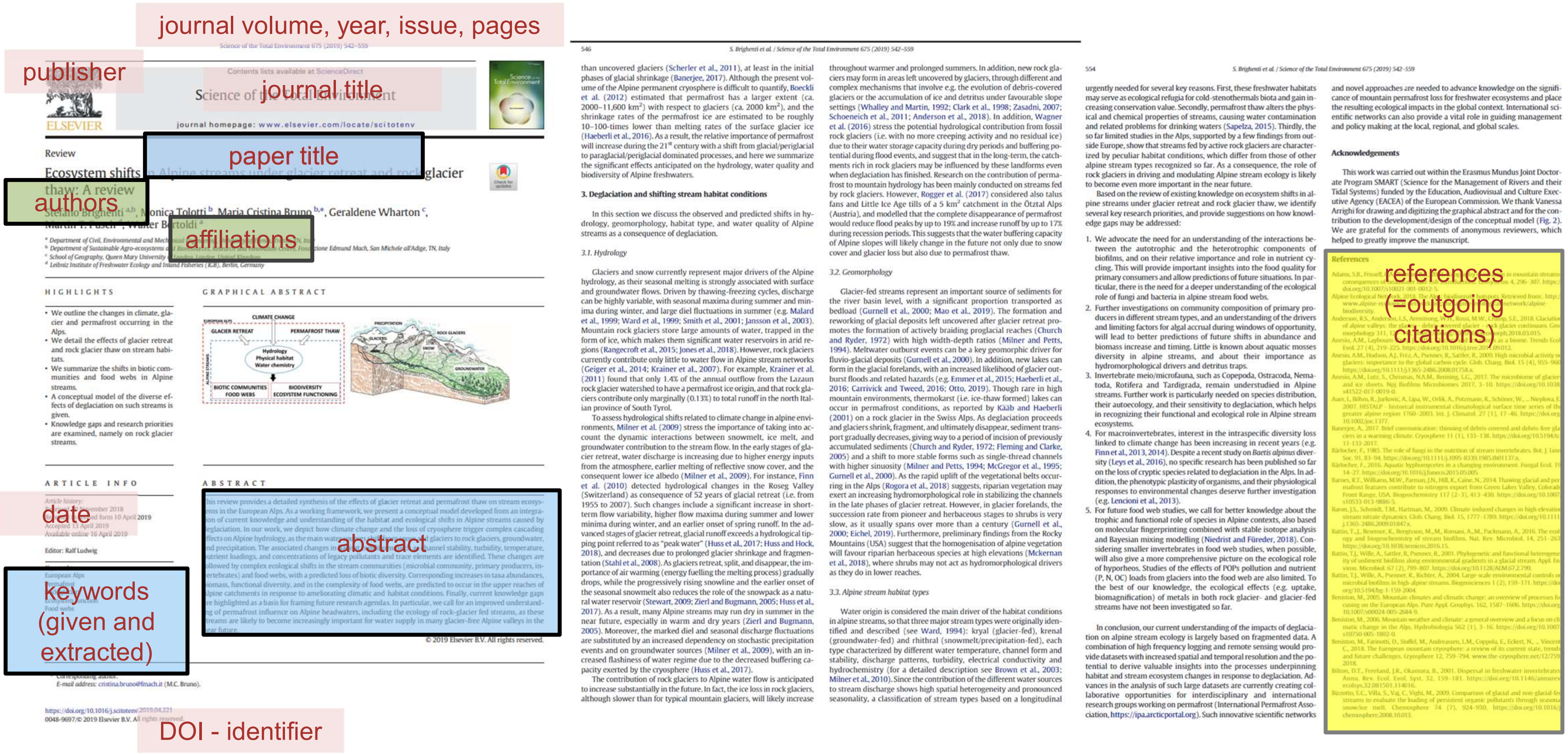
DOI - identifier

Anatomy of a scientific paper: Descriptive metadata

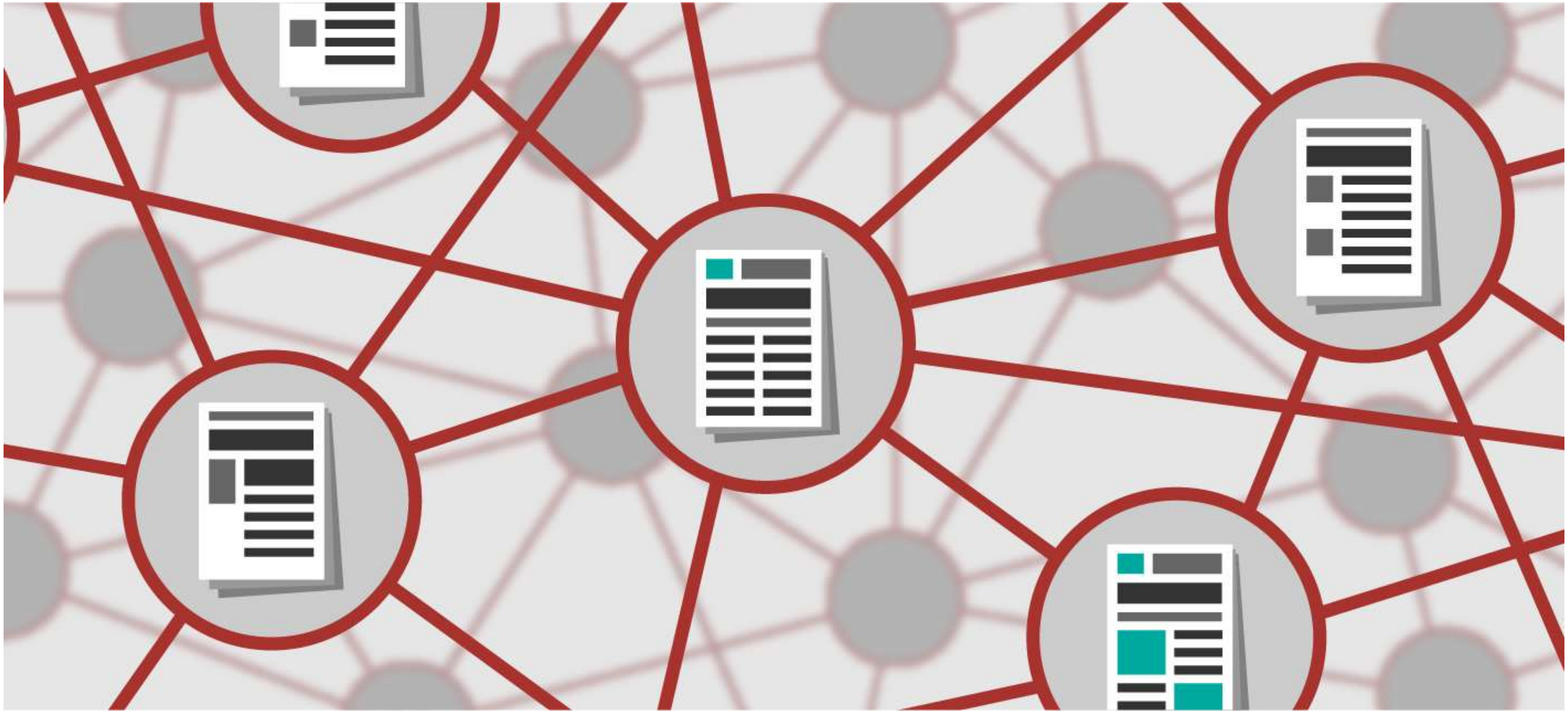


Anatomy of a paper: References

Anatomy of a paper: information used for network analysis



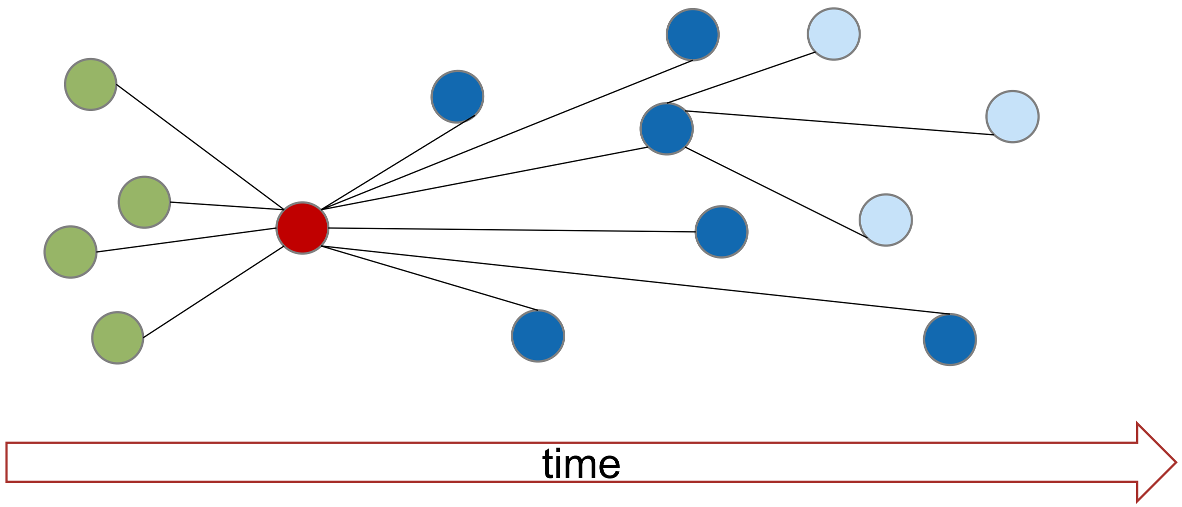
Scientific papers form networks



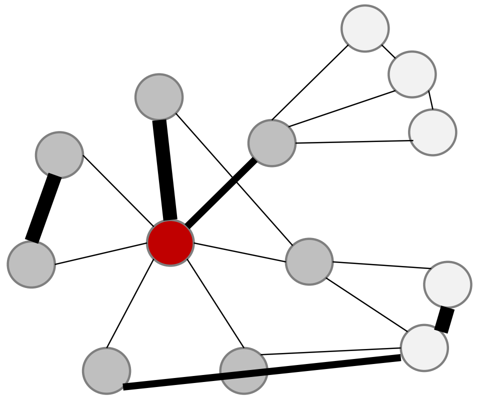
Networks

Scientific papers form networks: 1.) Citation network (terms used)

- **Paper** = article = journal article = work
- **Seed paper**, **source paper**, origine paper = ***important paper – in my subjective view***
  - has **references** = cites **earlier works** = cites **prior works**
  - is **cited by** = is cited by **later works** = has **citations**



Scientific papers form networks: 2.) Collaboration networks



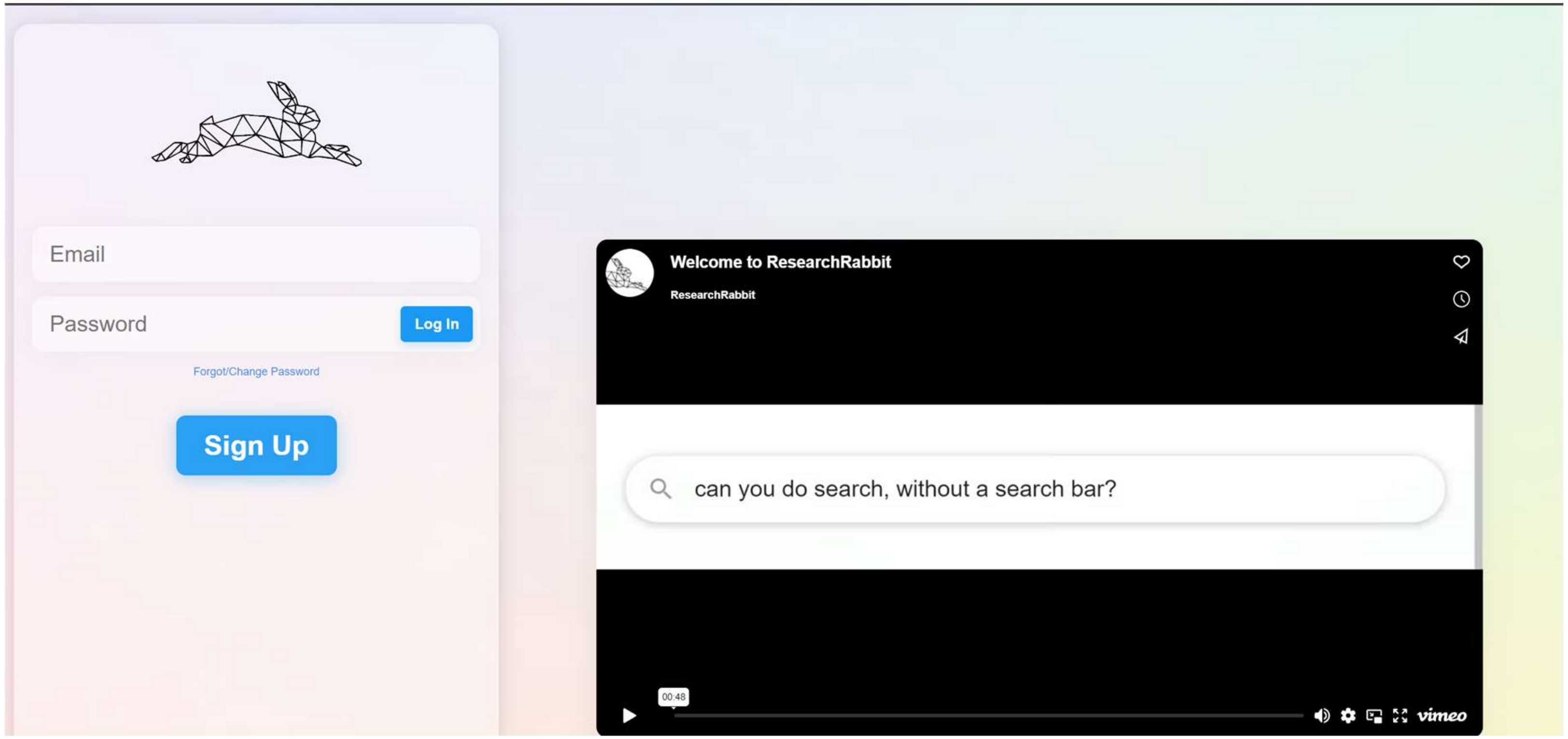
- Researcher A
- Direct collaborators
- Collaborators of collaborators
- \# of publications together

Possible also for institutions, topics …

Research Rabbit

Research Rabbit: Sign up

https://researchrabbitapp.com/home



Research Rabbit: Procedure

ResearchRabbit

1. Create new collection or select existing collection
2. Add paper(s)
3. Explore
   – earlier / later / similar works
   – authors
4. Export selected papers
   – BibTex, RIS, CSV

My seed paper
Brighenti, Stefano, et al. "Ecosystem **er:**Shifts in Alpine Streams Under Glacier Retreat and Rock Glacier Thaw: A Review." The Science of the Total Environment, vol. 675, 2019, pp. 542–59, https://doi.org/**10.1016/j.scitotenv.2019.04.221.**

Demo

Limitations & Recommendations

Recommendations

Limitations

- What is the **data source**? ResearchRabbit uses Semantic Scholar & Pubmed. No data source covers “everything”!
- Analysis and visualization is based on a **subset of data** (= result list)
- Tools emerge and disappear – **longevity** of a tool is not guaranteed

Recommendations

⇒ use the tools with these limitations in mind

⇒ **cannot replace searching classic databases**

⇒ **cannot replace reference management tools**

⇒ **can serve as an additional discovery path (visual approach ☺)**

Further information

ResearchRabbit help

- ResearchRabbit FAQ -> see help on https://researchrabbitapp.com/home (on the right hand side)

Other tools with similar approach

- Connected papers https://www.connectedpapers.com/
- Inciteful https://inciteful.xyz/
- Litmaps https://www.litmaps.com

ETH Library website information pages

- Use of electronic media at ETH Zurich
- Information on «classic» databases: Dimensions Analytics, Scopus, Web of Science
- Subject specific databases: Media sorted by subject
- Managing references

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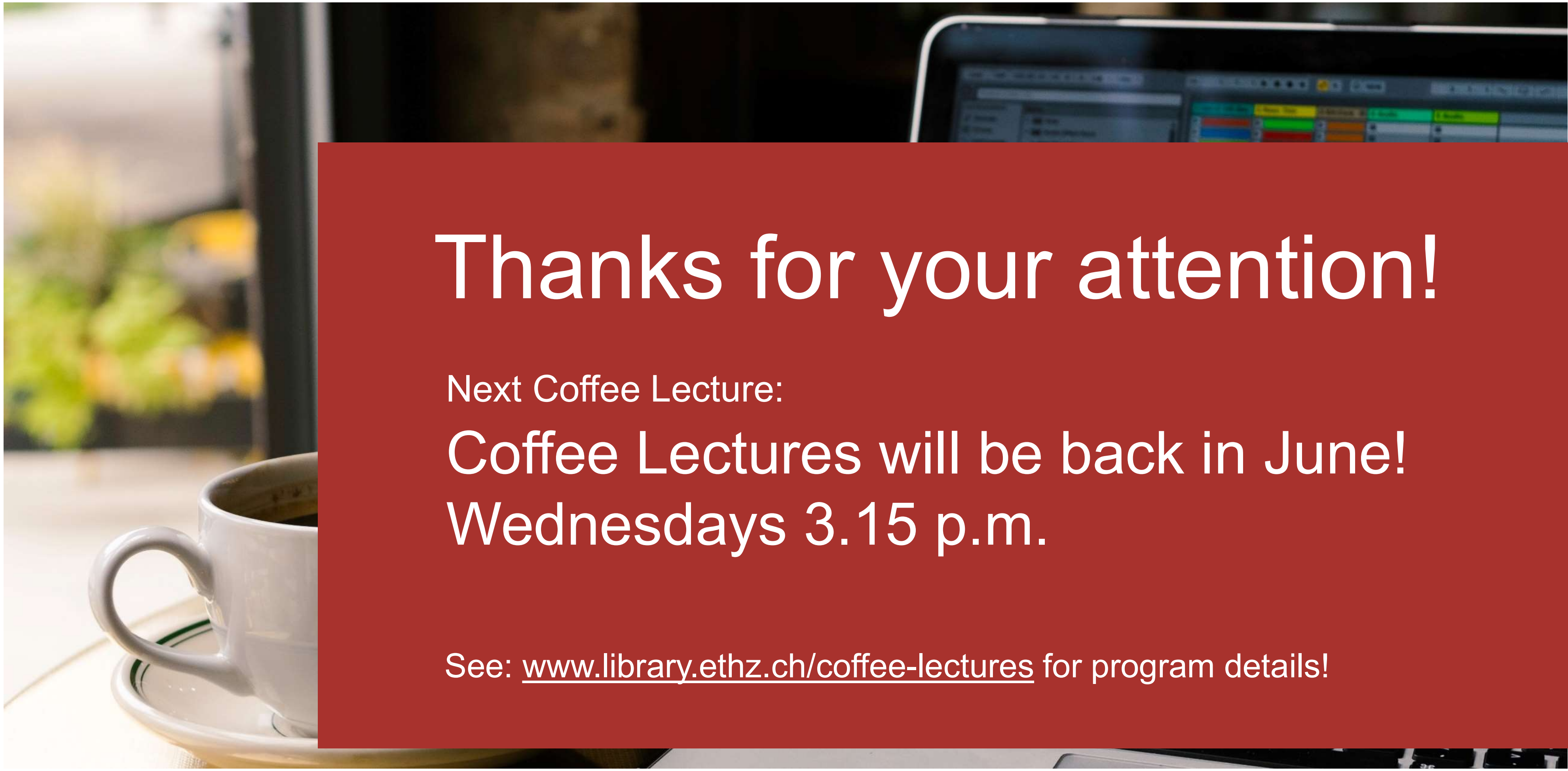

Thanks for your attention!

Next Coffee Lecture:

Coffee Lectures will be back in June!
Wednesdays 3.15 p.m.

See: www.library.ethz.ch/coffee-lectures for program details!