

# Episciences, open access overlay journals

Masterclass: Open Science  
and Scientific Publishing

14.06.2023

Céline Barthonnat, CCSD  
Publishing Officer Episciences

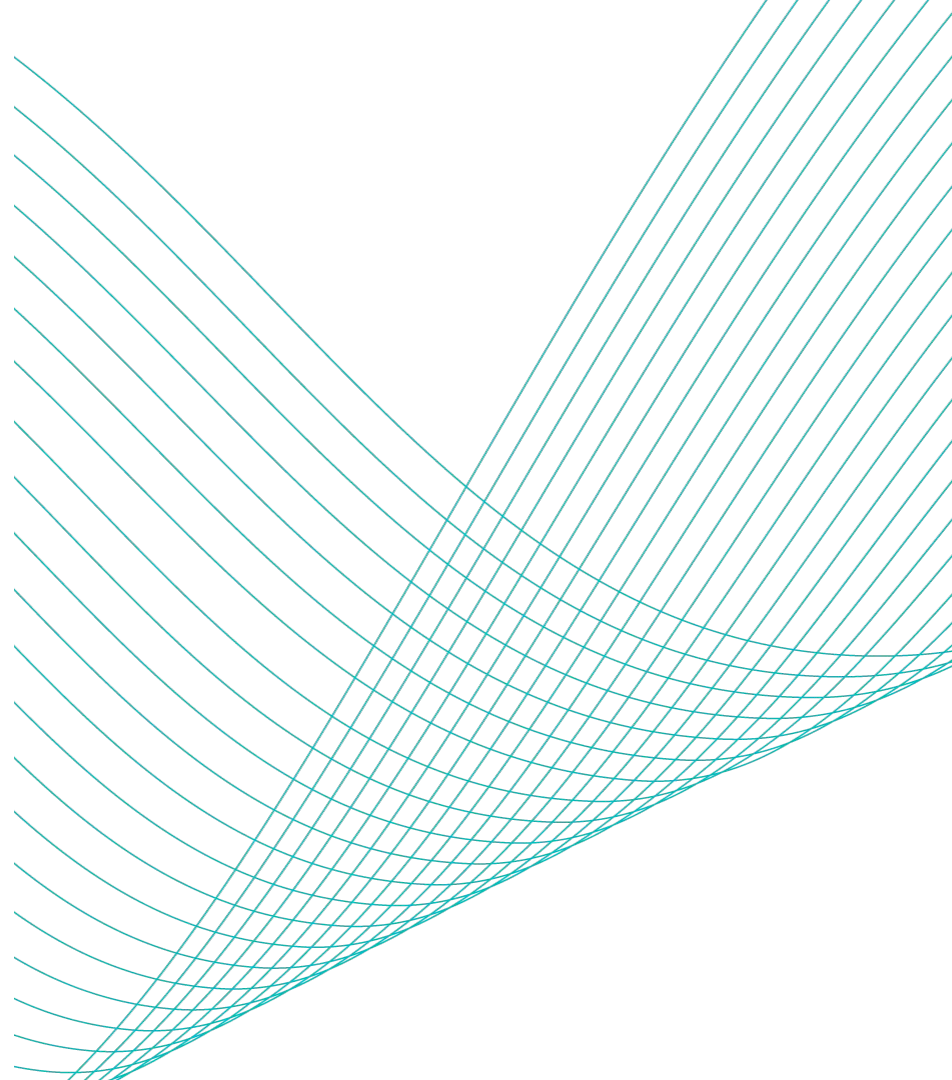
**CCSD** ● ■ ◆  
Centre pour la Communication  
Scientifique Directe



# 01

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## What is Episciences?



## Episciences

### Platform for publishing OA scientific journals

- Any disciplines
- New or flipping journals
- Diamond open access (free to both authors and readers)





## An overlay (epi) journal model

- Operating on top of OA repositories e.g. [HAL](#), [arXiv](#), [Zenodo](#), ...
- Peer-review preprints:
  - single blind review
  - open peer review
- All versions are always available online:
  - During the whole publication process;
  - If the journals disappears or moves;
  - Updates are still possible on journal/archive.

The idea was proposed to the CCSD in 2003  
by Professor Jean-Pierre Demailly, a mathematician.

English [ [edit](#) ]

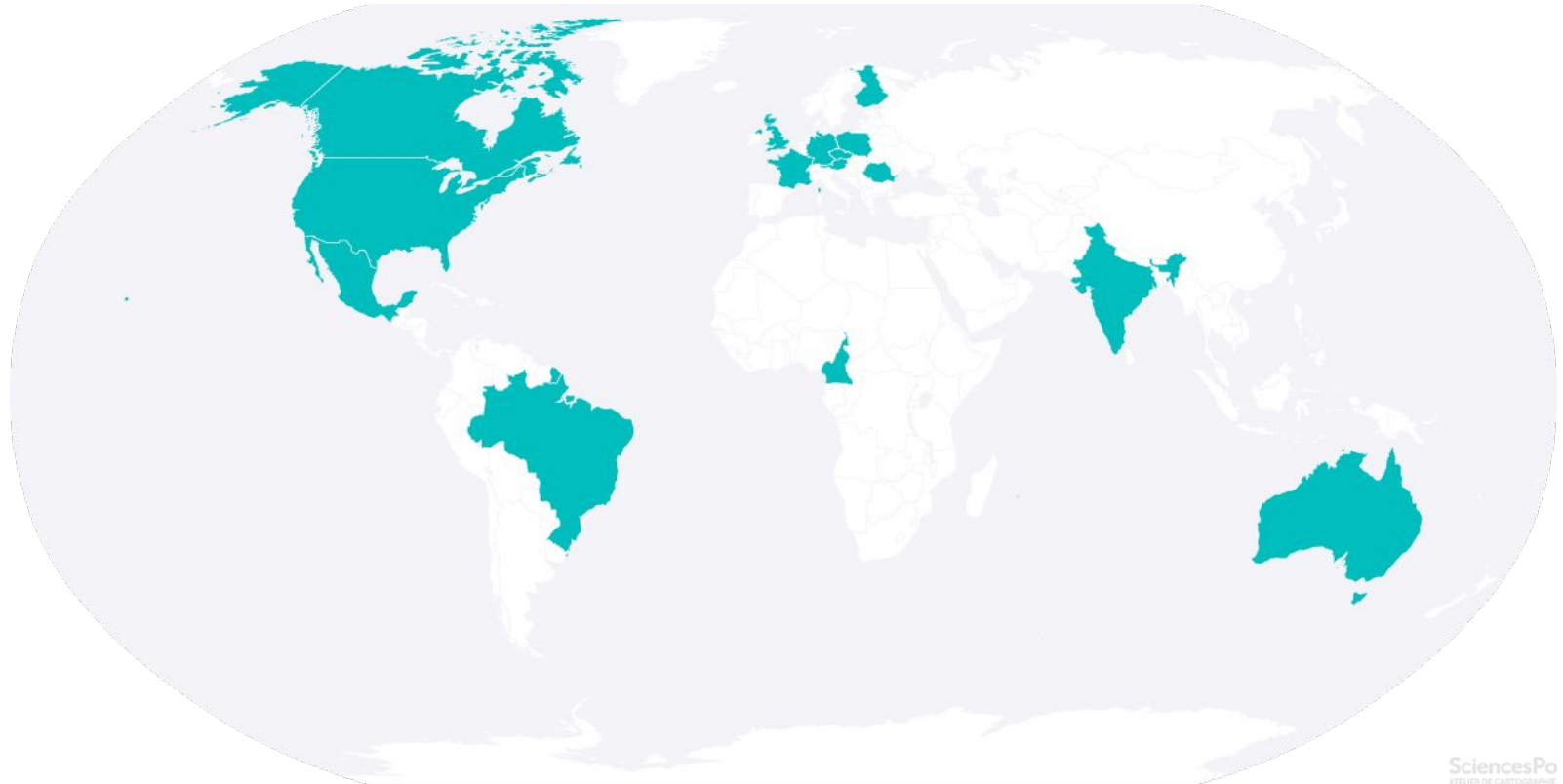
**Etymology** [ [edit](#) ]

From [Ancient Greek](#) ἐπί (*epí*, “on top of”).

**Prefix** [ [edit](#) ]

epi-

1. [Above, over, on, in addition to](#)
2. ([chemistry](#)) Denotes an [epimeric](#) form



# 26

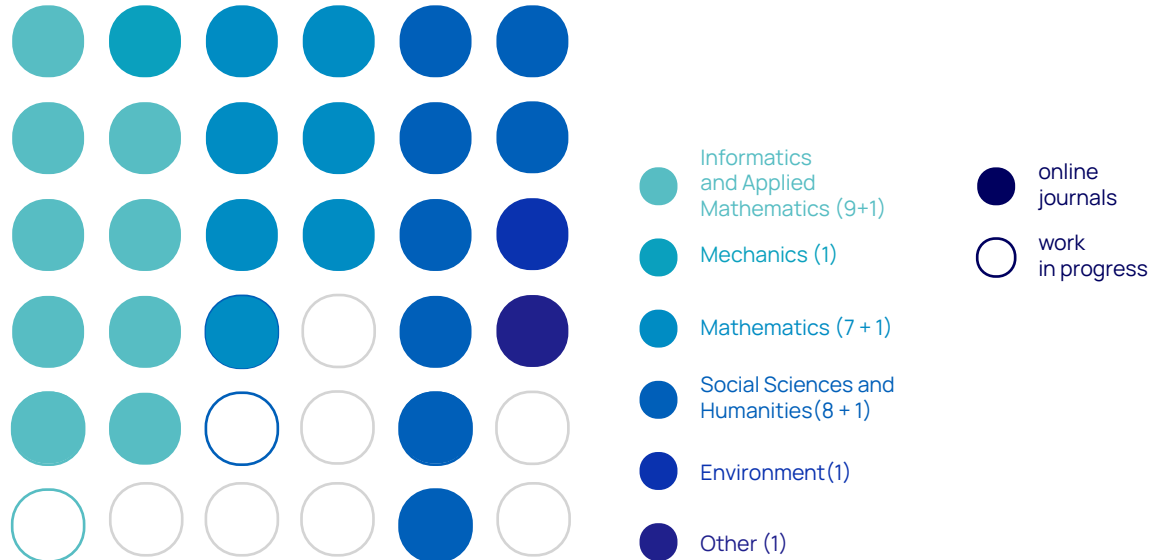
journals on Episciences  
(14/06/2023)

# 5

new journals in 2022/2023:

- *Les Cahiers Scientifiques du Transport*
- *Electronic Notes in Theoretical Informatics and Computer Science (Entics)*
- *Archéologies. Sociétés, réseaux, matériaux*
- *Partenariat soin patient analyses*
- *Recherche en Didactique des Mathématiques (RDM)*

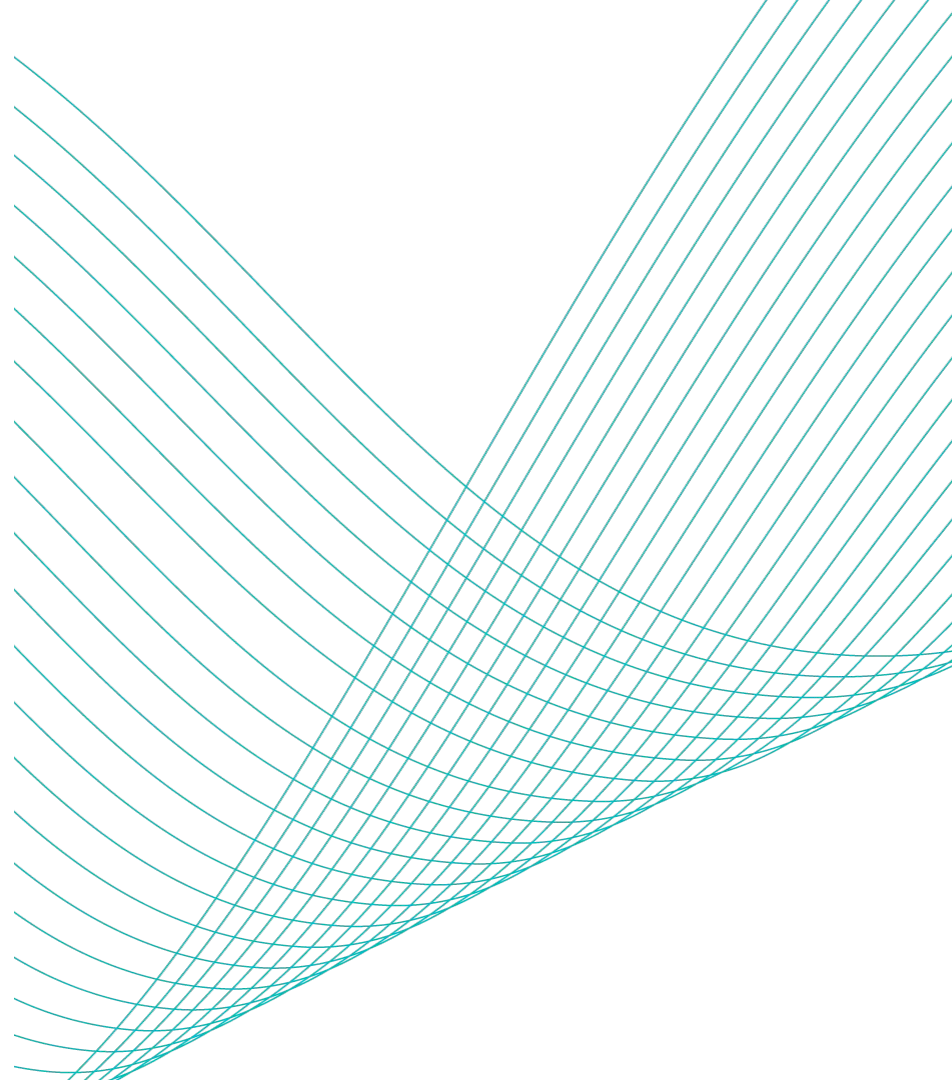
## Journals by field and status



# 02

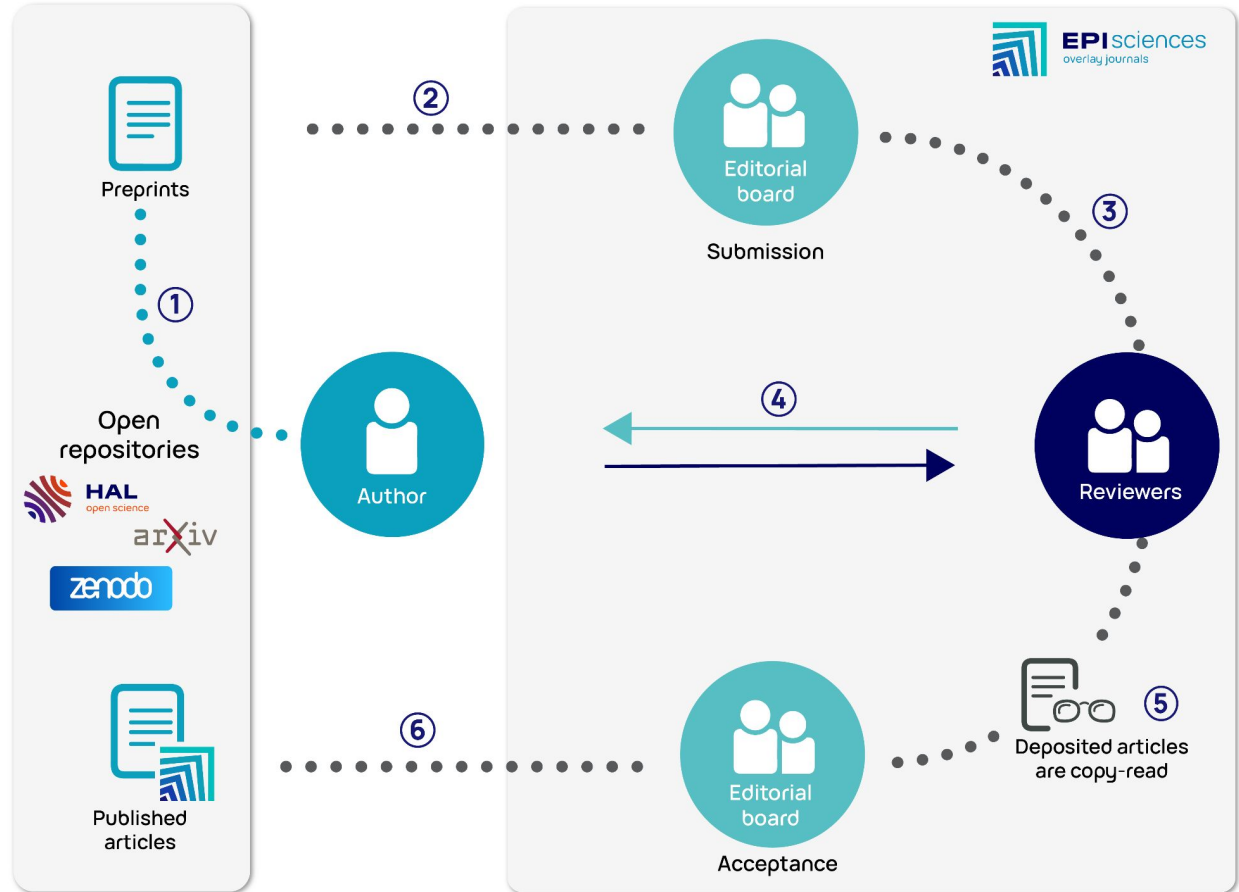
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## Functioning





# Workflow



## EpiSciences organisation

- **Steering Committee**  
reviews general platform orientations and epi-committees
- **Epi-committees**  
select new journals in their disciplines:
  - EpilAM;
  - EpiMaths;
  - EpiSSH.
- **Editorials Committees** organise:
  - evaluation and scientific discussion;
  - peer-reviewing;
  - copy-editing;
  - publication.



## Episciences in figures


June 2023

# 8

support  
and editorial assistance staff

 Head of the platform  
Developers  
Publishing Officer

 Scientific Information and  
Publishing Department  
(Informatics and Applied  
Mathematics)

 Research engineer  
(Mathematics)

Raphaël Tournoy  
Julien Charles, Djamel Chibane  
Céline Barthonnat

Hélène Lowinger  
Emmanuelle Perrin  
Catherine Scotton

Ariane Rolland

# 5 570

Publications

# 11 832

Users

## Episciences for the scientific communities

### Reducing costs

- . No subscriptions, no APC, free hosting and support
- . Publish at a reasonable cost (shared infrastructure, hosting and preservation by repositories)
- . Reinvesting public money in a public service for scientific dissemination

### Adding value to AO

- . Validation/certification of preprints

### Reduce time to access publications

- . Preprints are immediately available
- . Stay online, even if refused



## Episciences for the scientific communities

### Traceability

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- . Track the evolution of document versions, even after publication
- . Consider publications as a conversation flow, beyond a simple published version

### Open by design

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- . Compliant with open access mandates

### Allow authors to retain their rights

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- . CC licences, non-exclusive distribution rights to journals





## Episciences for the scientific communities

### Long term access

- . Maintain control over access to publications/ evaluations
- . Maintain access to content even if the journal ceased publication

### Scientific independence

- . Allow scientific communities to own their journals and the data created by their activity
- . To have a scientific publication policy independent of a commercial logic

### FAIR & Bibliodiversity

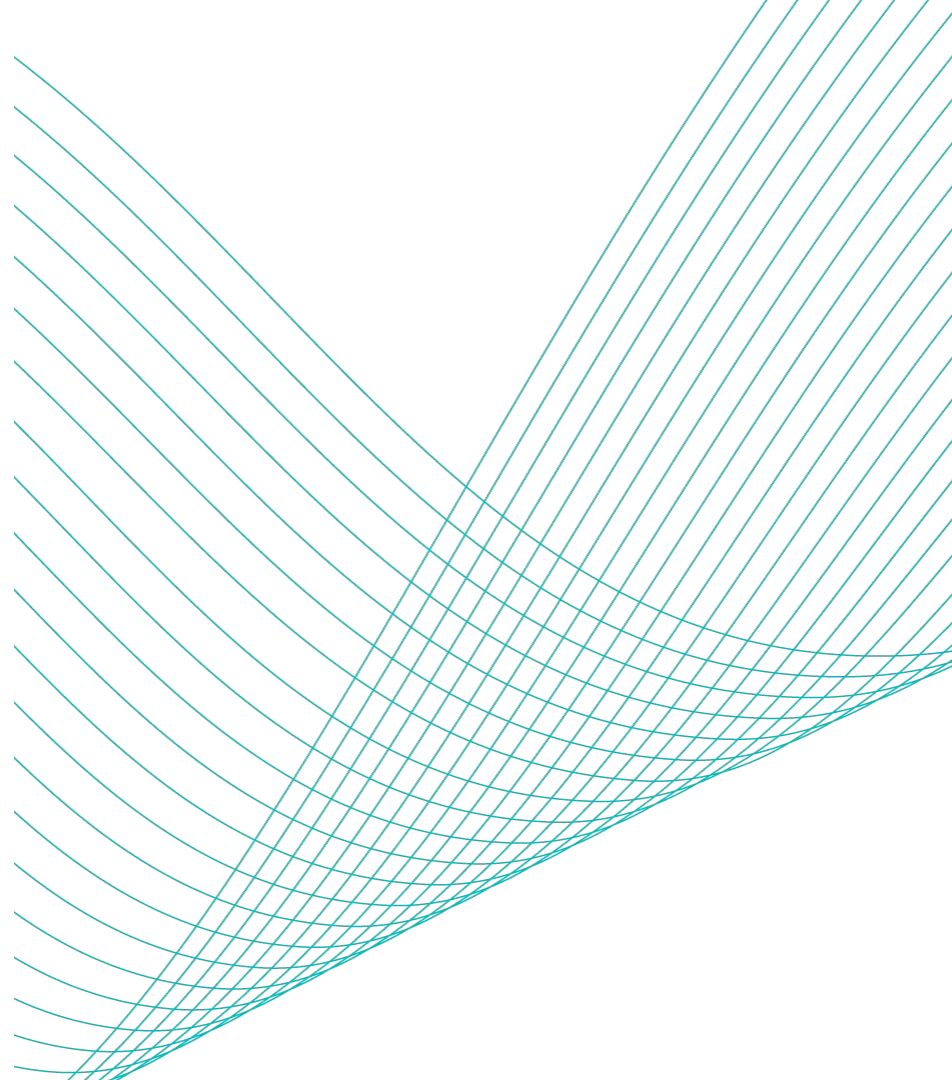
- . Meets FAIR principles (Findable, Accessible, Interoperable, Reusable)
- . More bibliodiversity



# 03

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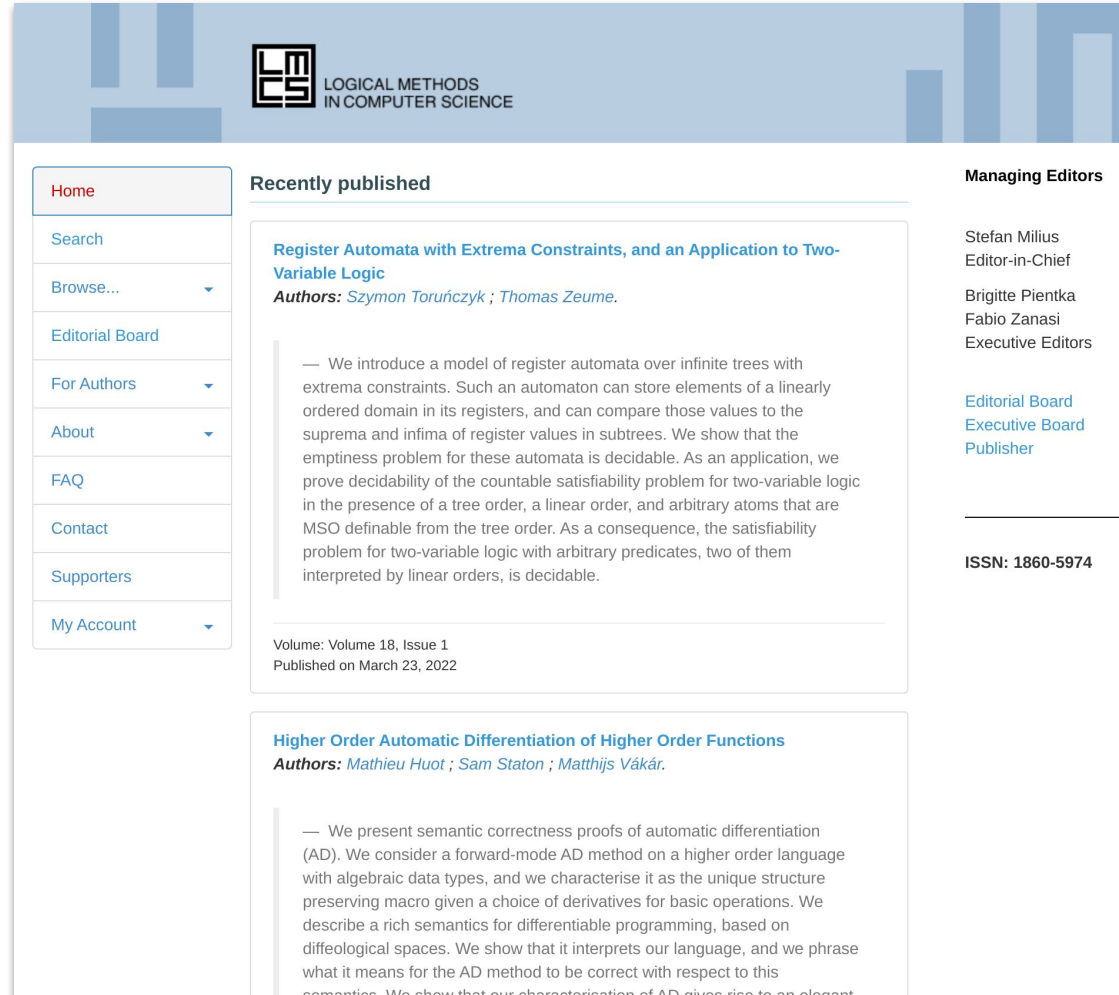
## How to use Episciences



Each journals has its own domain name

example:

<https://lmcs.episciences.org/>



The screenshot shows the journal's homepage. At the top, the LMCS logo and the text "LOGICAL METHODS IN COMPUTER SCIENCE" are displayed. A navigation menu on the left includes links for Home, Search, Browse..., Editorial Board, For Authors, About, FAQ, Contact, Supporters, and My Account. The main content area features a "Recently published" section with two articles. The first article is "Register Automata with Extrema Constraints, and an Application to Two-Variable Logic" by Szymon Toruńczyk and Thomas Zeume, published in Volume 18, Issue 1 on March 23, 2022. The second article is "Higher Order Automatic Differentiation of Higher Order Functions" by Mathieu Huot, Sam Staton, and Matthijs Vákár. On the right side, the "Managing Editors" are listed as Stefan Milius and Brigitte Pientka, and the "Executive Editors" as Fabio Zanasi. The "Editorial Board Executive Board Publisher" is also mentioned. The ISSN number 1860-5974 is displayed at the bottom right.

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<https://arxiv.org/abs/1802.05734v1>

arXiv.org &gt; math &gt; arXiv:1802.05734v1

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## Mathematics &gt; Logic

*[Submitted on 15 Feb 2018 (this version), latest version 23 Apr 2020 (v10)]*

# Writability and reachability for alpha-tape infinite time Turing machines

Merlin Carl, Benjamin Rin, Philipp Schlicht

Infinite time Turing machines with tape length  $\alpha$  (denoted  $T_\alpha$ ) were introduced by Rin to strengthen the  $\omega$ -tape machines of Hamkins and Kidder. It is known that for some countable ordinals  $\alpha$ , these machines' properties are quite different from those of the  $\omega$ -tape case. We answer a question of Rin about the size of the least ordinal  $\delta$  such that not all cells are halting positions of  $T_\delta$  by giving various characterizations of  $\delta$ . For instance, it is the least ordinal with any of the properties (a) there is a  $T_\alpha$ -writable real that is not  $T_\delta$ -writable for some  $\alpha < \delta$ , (b)  $\delta$  is uncountable in  $L_{\lambda_\delta}$ , or (c)  $\delta$  is a regular cardinal in  $L_{\lambda_\delta}$ , where  $\lambda_\delta$  denotes the supremum of ordinals with a  $T_\delta$ -writable code of length  $\delta$ . We further use these characterizations together with an analogue to Welch's submodel characterization of the ordinals  $\lambda$ ,  $\zeta$  and  $\Sigma$ , to show that  $\delta$  is closed under the function  $\alpha \mapsto \Sigma_\alpha$ , where  $\Sigma_\alpha$  denotes the supremum of the ordinals with a  $T_\alpha$ -accidentally writable code of length  $\alpha$ .

Subjects: **Logic (math.LO)**; Logic in Computer Science (cs.LO)Cite as: [arXiv:1802.05734](https://arxiv.org/abs/1802.05734) [math.LO](or [arXiv:1802.05734v1](https://arxiv.org/abs/1802.05734v1) [math.LO] for this version)

## Submission history

From: Philipp Schlicht [[view email](#)]

[v1] Thu, 15 Feb 2018 19:55:02 UTC (23 KB)

## #2 Import your preprint on a journal

with your preprint ID:  
1802.05734v1

### Submit an article

#### Guidelines

You are about to submit a paper. Please check:

- that your paper is deposited on an open access repository (arXiv)
- that you have its identifier at hand

The paper's identifier, its version and the repository it is located on are information that need to be entered in the form below. Metadata will automatically be retrieved and you will see a summary of your paper before confirming the submission - please check that this is the manuscript you wish to submit to the journal.

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*Enter the document identifier.*

1802.05734

Version \*

*Enter the document version (number only).*

1

Search



## Metadata retrieved with arXiv's APIs

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**Mathematics > Logic**

### Reachability for infinite time Turing machines with long tapes

[Merlin Carl](#), [Benjamin Rin](#), [Philipp Schlicht](#)

Infinite time Turing machine models with tape length  $\alpha$ , denoted  $T_\alpha$ , strengthen the machines of Hamkins and Kidder [HL00] with tape length  $\omega$ . A new phenomenon is that for some countable ordinals  $\alpha$ , some cells cannot be halting positions of  $T_\alpha$  given trivial input. The main open question in [Rin14] asks about the size of the least such ordinal  $\delta$ . We answer this by providing various characterizations. For instance,  $\delta$  is the least ordinal with any of the following properties: (a) For some  $\xi < \alpha$ , there is a  $T_\xi$ -writable but not  $T_\alpha$ -writable subset of  $\omega$ . (b) There is a gap in the  $T_\alpha$ -writable ordinals. (c)  $\alpha$  is uncountable in  $L_{\lambda_\alpha}$ . Here  $\lambda_\alpha$  denotes the supremum of  $T_\alpha$ -writable ordinals, i.e. those with a  $T_\alpha$ -writable code of length  $\alpha$ .

We further use the above characterizations, and an analogue to Welch's submodel characterization of the ordinals  $\lambda$ ,  $\zeta$  and  $\Sigma$ , to show that  $\delta$  is large in the sense that it is a closure point of the function  $\alpha \mapsto \Sigma_\alpha$ , where  $\Sigma_\alpha$

API 

Merlin Carl ; Benjamin Rin ; Philipp Schlicht - Reachability for infinite time Turing machines with long tapes

### Reachability for infinite time Turing machines with long tapes

*Authors: Merlin Carl ; Benjamin Rin ; Philipp Schlicht*

Infinite time Turing machine models with tape length  $\alpha$ , denoted  $T_\alpha$ , strengthen the machines of Hamkins and Kidder [HL00] with tape length  $\omega$ . A new phenomenon is that for some countable ordinals  $\alpha$ , some cells cannot be halting positions of  $T_\alpha$  given trivial input. The main open question in [Rin14] asks about the size of the least such ordinal  $\delta$ . We answer this by providing various characterizations. For instance,  $\delta$  is the least ordinal with any of the following properties: (a) For some  $\xi < \alpha$ , there is a  $T_\xi$ -writable but not  $T_\alpha$ -writable subset of  $\omega$ . (b) There is a gap in the  $T_\alpha$ -writable ordinals. (c)  $\alpha$  is uncountable in  $L_{\lambda_\alpha}$ . Here  $\lambda_\alpha$  denotes the supremum of  $T_\alpha$ -writable ordinals, i.e. those with a  $T_\alpha$ -writable code of length  $\alpha$ . We further use the above characterizations, and an analogue to Welch's submodel characterization of the ordinals  $\lambda$ ,  $\zeta$  and  $\Sigma$ , to show that  $\delta$  is large in the sense that it is a closure point of the function  $\alpha \mapsto \Sigma_\alpha$ , where  $\Sigma_\alpha$  denotes the supremum of the  $T_\alpha$ -accidentally writable ordinals.

Keywords: Mathematics - Logic, Computer Science - Logic in Computer Science

### #3 Peer review based on journal's grid

**Default grid** ^

Display 10 lines Search:

Criterion	Coef.	Comments	Upload	Rating	visibility	Actions
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⊕ Comments for author	-	Yes	Yes	Free rating	Contributor	<a href="#">Edit</a> <a href="#">Remove</a>
⊕ Reports	-	No	No	Free rating	Editors	<a href="#">Edit</a> <a href="#">Remove</a>
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## Peer-review

- Multiple rounds of peer-review
- New improved versions
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- Version 10
- Version 8
- Version 5
- Version 4
- Version 3
- Version 2



# Reachability for Turing machines with long tapes

Merlin Carl, Benjamin Rin, Philipp Schlicht

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Subjects: **Logic (math.LO)**; Logic in Computer Science (cs.LO)

Cite as: [arXiv:1802.05734](https://arxiv.org/abs/1802.05734) [**math.LO**]

(or [arXiv:1802.05734v5](https://arxiv.org/abs/1802.05734v5) [**math.LO**] for this version)

## Submission history

From: Philipp Schlicht [[view email](#)]

[v1] Thu, 15 Feb 2018 19:55:02 UTC (23 KB)

[v2] Wed, 21 Feb 2018 07:58:12 UTC (23 KB)

[v3] Mon, 21 Jan 2019 17:35:28 UTC (28 KB)

[v4] Thu, 23 May 2019 11:53:38 UTC (29 KB)

[v5] Thu, 5 Dec 2019 20:00:10 UTC (31 KB)

[v6] Tue, 10 Dec 2019 07:28:22 UTC (31 KB)

[v7] Mon, 9 Mar 2020 08:05:29 UTC (31 KB)

[v8] Wed, 8 Apr 2020 14:35:32 UTC (39 KB)

[v9] Mon, 20 Apr 2020 20:35:58 UTC (41 KB)

[v10] Thu, 23 Apr 2020 09:08:19 UTC (41 KB)

## #4 Journal Layout

Merlin Carl ; Benjamin Rin ; Philipp Schlicht

lmcs:4444 - Logical Methods in Computer Science  
[https://doi.org/10.23638/LMCS-16\(2:2\)2020](https://doi.org/10.23638/LMCS-16(2:2)2020)

## Reachability for infinite time Turing machines

Authors: Merlin Carl ; Benjamin Rin ; Philipp Schlicht

Infinite time Turing machine models with tape length  $\omega$ . A new phenomenon is that for some countable ordinals  $\alpha$ , some cells cannot be halting positions of  $T_\alpha$  given trivial input. The main open question in a paper of Rin from 2014 asks about the size of the least such ordinal  $\delta$ . (a) There is a gap in the  $T_\alpha$ -writable ordinals, i.e. those with a  $T_\alpha$ -writable code of length  $\alpha$ . (b) There is a submodel characterization of the ordinals  $\lambda$ ,  $\zeta$  and  $\Sigma_\alpha$ , where  $\Sigma_\alpha$  denotes the supremum of the


[https://doi.org/10.23638/LMCS-16\(2:2\)2020](https://doi.org/10.23638/LMCS-16(2:2)2020)Source : [oai:arXiv.org:1802.05734](https://arxiv.org/abs/1802.05734)

Volume: Volume 16, Issue 2

Published on: April 24, 2020

Submitted on: April 16, 2018

Keywords: Mathematics - Logic, Computer Science -

 Download this file Consult the article websiteREACHABILITY FOR INFINITE TIME TURING MACHINES WITH  
LONG TAPES

MERLIN CARL, BENJAMIN RIN, AND PHILIPP SCHLICHT

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*e-mail address:* merlin.carl@uni-konstanz.de

Departement Filosofie en Religiewetenschap, Utrecht University, Janskerkhof 13, 3512 BL, Utrecht, The Netherlands  
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**ABSTRACT.** Infinite time Turing machine models with tape length  $\alpha$ , denoted  $T_\alpha$ , strengthen the machines of Hamkins and Kidder with tape length  $\omega$ . A new phenomenon is that for some countable ordinals  $\alpha$ , some cells cannot be halting positions of  $T_\alpha$  given trivial input. The main open question in a paper of Rin from 2014 asks about the size of the least such ordinal  $\delta$ .

We answer this by providing various characterizations. For instance,  $\delta$  is the least ordinal with any of the following properties:

- For some  $\xi < \alpha$ , there is a  $T_\xi$ -writable but not  $T_\alpha$ -writable subset of  $\omega$ .
- There is a gap in the  $T_\alpha$ -writable ordinals.
- $\alpha$  is uncountable in  $L_{\lambda_\alpha}$ .

Here  $\lambda_\alpha$  denotes the supremum of  $T_\alpha$ -writable ordinals, i.e. those with a  $T_\alpha$ -writable code of length  $\alpha$ .

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## #5 Publication: one Version of Record

# Reachability for infinite time Turing machines with long tapes

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Subjects: **Logic (math.LO)**; Logic in Computer Science (cs.LO)  
 Journal reference: Logical Methods in Computer Science, Volume 16, Issue 2 (April 2020), #6429  
 DOI: [10.23638/LMCS-16\(2:2\)2020](https://doi.org/10.23638/LMCS-16(2:2)2020)  
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 (or [arXiv:1802.05734v10](https://arxiv.org/abs/1802.05734v10) [math.LO] for this version)

Carl, Merlin and Rin, Benjamin and Schlicht, Philipp - Reachability for infinite time Turing machines with long tapes

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## Reachability for infinite time Turing machines with long tapes

Authors: Carl, Merlin and Rin, Benjamin and Schlicht, Philipp

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Source : [oai:arXiv.org:1802.05734](https://arxiv.org/abs/1802.05734)

Volume: Volume 16, Issue 2

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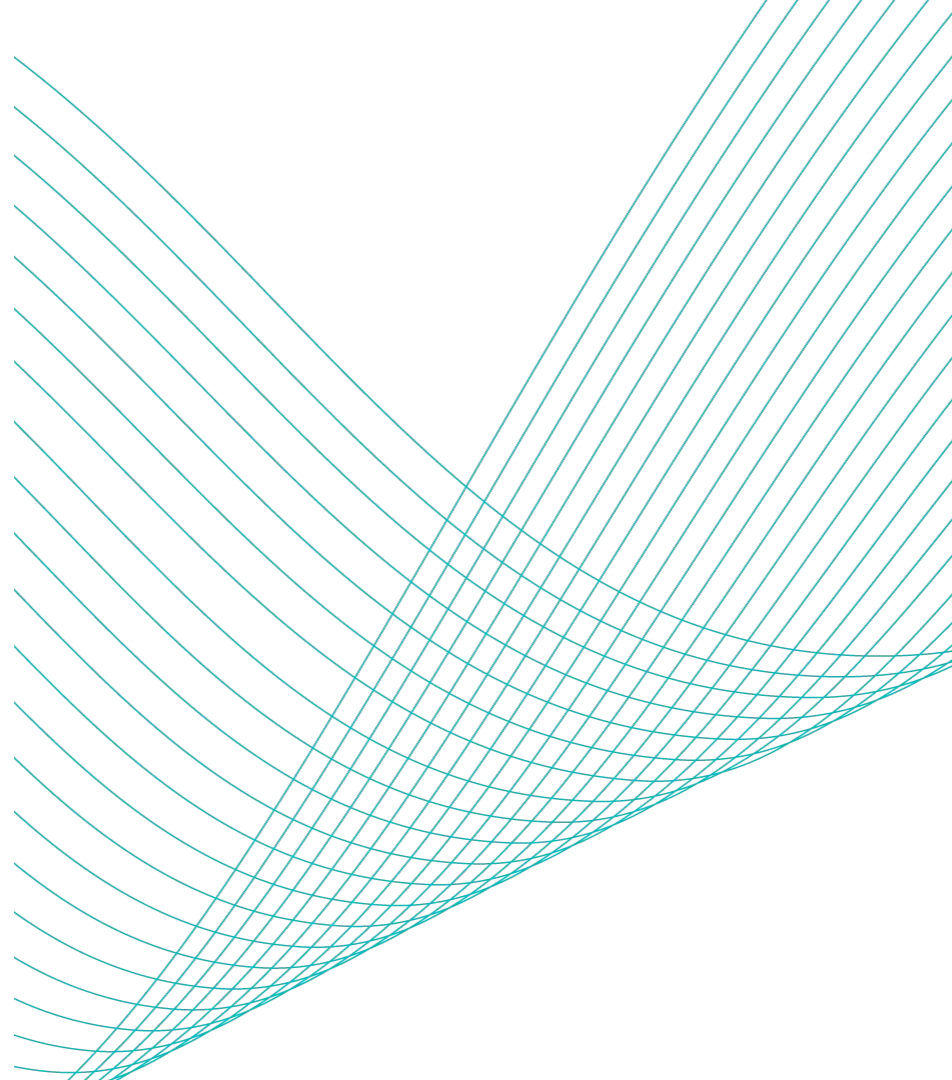
Current status: **Published**



# 04

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## Services



## Creation of a personalised site

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- . a personal website for each journal
- . configuration: menu, indexes, guidelines, editorial boards and policies, etc.
- . DOI for each published document
- . adapted graphic charter (stylesheet) with a header

25

## Technical support

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- . bilingual documentation (English/French)
- . technical support by email and GitHub
- . specific technical support by Inria (epiIAM), the Institut Fourier (epiMaths) and the CCSD (epiSSH)

## Help with the publication and distribution

---

- . ISSN
- . Creative Commons licences
- . copyright assignment contract
- . OA publishing requirements
- . advice and assistance in applying for institutional support
- . linking with service providers for copy-editing

## Referencing

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- . databases of each discipline (DBLP, ERIH Plus, MathSciNet, etc.)
- . interdisciplinary databases (DOAJ, Mir@bel, Sherpa Romeo, etc.)

# Thanks for your attention !

[contact@episciences.org](mailto:contact@episciences.org)

For further information:

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- <https://www.episciences.org/join-episciences/>