# Postdoctoral Researcher
## `CA-2026-postdoc-01`
## *Call for Applications*

[Topos Institute](#) is searching for a **Postdoctoral Researcher** to work on the category-theoretic structure and dynamics of working language, based in **Berkeley, CA**.

## Summary

We are a non-profit research institute dedicated to realising a world where the systems that surround us benefit us all, so that society can better cooperate on critical issues — the climate crisis, pandemic responses, agricultural modelling, global access to education, and more — through interconnected systems that consider holistic impacts. We develop new tools for collective inquiry and modelling, enabled by a combination of novel foundational mathematics, open-source software engineering, and meaningful collaboration with domain specialists. Collaboration and discussion are fundamental to our work culture, so we deeply value gathering in person at the office.

- **Title:** Postdoctoral Researcher
- **Start date:** No later than April 15, 2026
- **Location:** Berkeley, CA, with visits to Leander, TX
- **Employment type:** Full time (1.0FTE)
- **Duration:** 12 months, with possibility of extension
- **Salary:** $85,000–95,000

Topos is committed to building a team with diverse perspectives and life experiences, so those with personal or professional backgrounds underrepresented at Topos are highly encouraged to apply.

Further information about Topos Institute, including our [Blog](#) and [YouTube](#) pages, can be found on our website: [topos.institute](#).

## About the position

A working language is a compositional symbol system that guides material activity—DNA directing protein synthesis, a programming language directing transistors, a contract directing human behavior. Such languages are formed and refined across all scales, and they guide by compressing: the tighter the encoding, the more precisely energy can be routed. The question driving this project is: how does this

formation and refinement happen? What are the dynamics by which languages come to work?

The framework of polynomial functors may be suitable for this work, as they can model interfaces, delegation, and how interaction patterns update over the course of interaction. The postdoc will extend this framework to formalize how working languages emerge and refine.

Applicants must be strong in mathematics or computer science with solid knowledge of category theory. We welcome applicants with backgrounds in algorithmic information theory, learning theory, or origins-of-life research, and those drawn to foundational questions about agency, organization, and meaning. Applicants with underrepresented perspectives and backgrounds are highly encouraged to apply.

This position is based at Topos Institute in Berkeley, CA, with daily in-office expectations and some flexibility for remote work. The supervising researcher (David Spivak) is based in Texas; the postdoc will meet with him 2–3 hours weekly online. David visits Berkeley approximately 13 weeks per year, and the postdoc will visit Texas for 4–13 weeks per year for intensive collaboration.

## Responsibilities

- Lead and conduct mathematical research on the compositional structure and dynamics of working languages

- Write academic papers and contribute to grant deliverables

- Collaborate with Topos Institute researchers and external partners

- Present work at conferences and workshops

- Contribute to educational materials and open-source research software as appropriate

## About you

A successful candidate will:

- Have strong foundations in category theory; PhD in mathematics, computer science, or related field (completed or expected by start date); within 5 years of PhD completion

- Work comfortably at the boundary between mathematics and philosophy—where problems aren't yet fully formalized

- Read and engage critically with the research motivating this position

- Contribute to both theoretical development and implementation

- Communicate clearly in writing and conversation

- Collaborate closely with a remote supervisor and with colleagues at Topos Berkeley

There is evidence to suggest that women and people of color are less likely to apply for jobs unless they believe they meet every one of the qualifications as described in the job description. If this role speaks to you, we encourage you to apply, even if you don't believe you tick all the boxes.

## Eligibility criteria

Topos will consider sponsoring a US visa for exceptional candidates.

Topos is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or status as a protected veteran.

## Us and you

We are dedicated to shaping the future of technology to ensure a more just world, and we believe that a technology that supports a healthy society can only be built by an organisation that supports its team members. As such, Topos is committed to ensuring that we clearly and compassionately negotiate your role and responsibilities while you're at Topos, and then ensuring that you have the support that you need to fulfill that role.

Topos offers generous benefits including medical, dental, and vision insurance (all premiums covered), 18 days paid vacation annually, 13 paid company holidays annually, and a 401(k) plan (non-matching).

## Why Topos?

**Exceptional Team.** Collaborate with world-leading researchers and high calibre funding agencies.

**Inclusive Environment.** Be part of building a diverse team where different perspectives are valued and everyone can contribute their best work.

**Meaningful Impact.** Lead breakthrough research on humanity's most pressing challenges—from climate change to public health to collaborative open science.

**Technical Innovation.** Support the development of genuinely novel technologies that could transform how humanity approaches complex, collaborative decision-making.

**Supportive Culture.** Join a caring, inquiry-driven community that values both intellectual rigor and personal wellbeing, with a strong focus on in-person office culture but flexibility to support work-life balance.

**Growth Opportunity.** Shape a team poised for significant expansion and impact.

## Application process

To apply for this position, please email **CA-2026-postdoc-01@topos.institute** with the subject line "**CA-2026-postdoc-01**" and two PDF attachments:

1. a copy of your CV; and
2. a cover letter **including the contact details for two references** each of whom we can contact to ask for a letter of recommendation.

Your cover letter might describe your interest in the Topos Institute and this position, your professional experience, your future goals, your specific relevant experience, and your potential contribution to a diverse and inclusive environment at Topos. Please feel free also to convey any information about preferred names and pronouns.

We will review applications on a rolling basis.

If you have any questions about the application, or the role in general, please email **CA-2026-postdoc-01@topos.institute**.