HITCHHIKER'S GUIDE TO RHEOLOGY

BUILDING A COMMUNITY FOR THE NEXT GENERATION

Michel Orsi & Léa Cailly-Brandstäter

When we launched The Hitchhiker's Guide to Rheology in early 2024, we had no idea how far it would go. What began as a small online seminar series for young rheologists quickly turned into a vibrant international community. Today, the initiative has reached thousands of people worldwide, created a free library of talks and lectures, and offered a platform for early-career researchers to share their passion for rheology.

Why We Started. Rheology is exciting, but for young researchers it can be difficult to find a voice in the wider community. Conferences are valuable but often intimidating and expensive, while schools and lecture series remain occasional events.

We wanted something different: a regular, global, low-barrier space where students and postdocs could present their work, exchange ideas, and feel part of a network. Our principles were simple:

- **Free access** for all;
- **Young rheologists** at the centre;
- **Pedagogical lectures** by senior experts;
- **Open recordings**, so nothing is lost.

The deliberately playful title *The Hitchhiker's Guide to Rheology* signalled that this would be welcoming, a little unconventional, and a tool to navigate the complex universe of soft matter.

How It Works. Each session includes either a research talk by an early-career researcher, a presentation from industry experts, or a lecture by a senior scholar, followed by discussion. The lectures are pedagogical – closer to classes than to research talks – so they remain useful resources for students and newcomers.

All events are online, recorded, and uploaded to YouTube. Talks are also indexed on our website (`www.thehitchhikersguidetorheology.com`) to ensure easy access.

Milestones So Far. The response has been beyond our expectations:

- 10,000+ visitors from 60+ countries have accessed our website;
- 150+ YouTube subscribers, with hundreds of hours of watch time;
- 23 talks by young scholars on diverse topics;
- 10 lectures by established experts, including leading figures in the field.

The diversity of the community has been striking, with speakers from every continent. Q&A sessions often turn into lively exchanges where students and professors engage on equal terms.

Highlights. Our first session set the tone: over 100 people joined live from multiple time zones to hear a PhD student present. It was a clear sign that this space was needed.

Another highlight has been the strong reception of the classes, now among our most-watched videos. They have helped undergraduates prepare for exams, PhD students enter new topics, and even industry professionals brush up on fundamentals.

Perhaps most meaningful is the feedback from young speakers, who said this was their *first international presentation*. For some, it was practice before a big congress; for others, a rare chance to connect with peers worldwide. We have also been approached at conferences by colleagues who thanked us in person for the initiative, a gesture that has been both encouraging and motivating.

Challenges. Time zones are always tricky: a convenient hour in Europe can mean the middle of the night in Asia. We try to vary schedules and make all talks available afterwards.

Sustaining momentum also takes work. As active researchers ourselves, logistics and outreach can be demanding. Yet every message of thanks reminds us why it matters.

What's Next. The adventure is only beginning. Our goal is to expand the network – reaching more young rheologists everywhere, especially in underrepresented regions. The richness of this community lies in its diversity, and we want to amplify it.

We are also dreaming bigger: one day, to bring the community together in person at an event where the faces we see online finally meet – talks, discussions, and spontaneous conversations over coffee. That is the kind of gathering we hope to create.

Meanwhile, we will keep enriching the online library of talks and lectures, freely available to all. The vision is simple: a lively, inclusive community of rheologists

who learn from one another and build the future of the field together.

After all, hitchhiking is about the journey – and we are excited to see where this one leads.

A Note of Thanks. None of this would have been possible without those who joined us. We are deeply grateful to all the researchers who shared their work with energy and courage – they are the heart of the series. We equally thank the senior scientists who dedicated their time to preparing clear, engaging lectures and embraced the spirit of making rheology accessible to everyone. Their openness has been invaluable.

The title of our series is a nod to *The Hitchhiker's Guide to the Galaxy*. Like that book, our project is about exploration, discovery, and a touch of chaos – but always with curiosity, humour, and community at its core. We hope our Guide will keep helping travellers in the vast universe of rheology find their way.

And if anyone ever asks us what the ultimate answer to rheology might be – well, we'll happily say it's... 42.

Michel Orsi. *I am a postdoctoral Research Fellow at the Polytechnic University of Turin (Italy), where I study the behaviour of multiphase flows. I completed my PhD at the Nice Institute of Physics (France), working on the rheology of dense suspensions. Since then, my research path has taken me between France, Italy, and the United States of America, including two exciting years at the Levich Institute in New York. Beyond research, I care deeply about teaching and scientific outreach, and I'm always looking for ways to bring people together through science.*

Léa Cailly-Brandstäter. *I first met Michel during my internship at the Nice Institute of Physics, where, between experiments, we also started a music band. That shared sense of curiosity and creativity later led us to launch The Hitchhiker's Guide to Rheology. Today, I am finishing my PhD at CEMEF, Mines Paris-PSL (France), where I focus on the mechanics of capillary bridges and the rheology of viscoelastic fluids. When I am not in the lab, I also teach courses from fluid mechanics to granular flows, helping students navigate the wonderfully weird universe of science; don't panic!*