

# NEWSLETTER

## of the Work Group Mathematical Fluid Mechanics

*Newsletter no. 9 (2025)*

### BayFrance travel grant approved

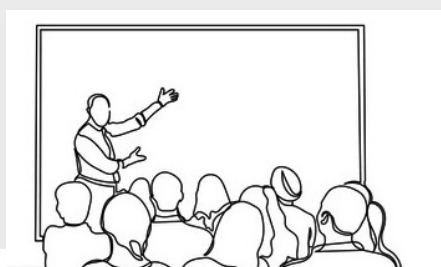


The BayFrance (Franco-Bavarian University cooperation center) has approved a travel grant. Wasilij Barsukow and myself had applied for. This will pay for scientific exchange visits between Würzburg and Bordeaux. Our research on the Active Flux numerical method for conservation laws will benefit from that.

### My student literature seminar

Both Bachelor and Master mathematics students here in Würzburg have to take a *seminar*. Taking into account their interests, I give them a paper to read, which they then present in a seminar talk towards the end of the semester.

This semester 15 students will give presentations in my seminar on a variety of topics. you can find the list [here](#).



### Peter Lax passed away May 16, 2025

Peter Lax, who was born 1926, passed away this month in New York. He has made important scientific contributions to partial differential equations (PDEs). Here I want to mention some of his less tangible contributions.

His was a holistic view of applied mathematics. When he made a scientific contribution, even though it could be categorized say as PDE theory, it had ramifications also to numerics and applications of PDEs. Part of his worldview came from a turn of the 19th to 20th century thinking, emphasizing the inter-connectedness of all aspects of the world and discouraging specialization. This guided the scientific problems he sought out.



Peter Lax,  
here he is - 80 years old

I was fortunate to have him as one of my teachers when I did my studies at the Courant Institute in New York. During oral exams (say at the end of a PDE course) he would ask seemingly simple questions, like asking us to solve the linear system of equations  $Ax = b$ . For him inverting the matrix  $A$  encompassed a number of fundamental principles that also apply in solving PDEs, both theoretically and numerically. When he interacted with students, he did so with enthusiasm and always encouraged them.

He was quite knowledgeable about classical music and shared the same enthusiasm for it as he did for mathematics. He was also equally passionate about literature and art, and espoused humanistic values. So, as you say in Yiddish, he was a real *Mensch*.

## Jan Nordström moved the dates of his visit

Jan Nordström had planned to visit us this summer. Now he had to postpone his visit to the fall.

## Kathrin at Caltech

At the beginning of this month [Kathrin Hellmuth](#) has moved to Caltech to begin her post-doctoral position there. By now she has settled in and is enjoying the fruitful scientific atmosphere at the Caltech department of [Computing and Mathematical Sciences](#).

The weather in the Los Angeles area, where Caltech is located, is quite agreeable. Subtropical plants thrive there, contributing to the overall relaxed living atmosphere, in which Kathrin can thrive.

## Upcoming scientific conferences

Click on the links and check where you might want to participate.

- June 9 - 13, **2025**: [Numerical methods for hyperbolic problems 2025](#) (NumHyp25), in Darmstadt, organized by Jan Giesselmann and others
- June 25 - 27, 2025: [Mathematics of compressible fluids - analysis and numerics](#), organized by Dominic Breit and Philipp Öffner in Clausthal, Germany
- June 24 - 27, 2025: [30th Biennial Conference in Numerical Analysis](#) in Glasgow, organized by persons from the University of Strathclyde, Glasgow
- July 13 - 18, 2025: [International Conference on Spectral and High-Order Methods](#) (ICOSAHOM), in Montreal, Canada
- July 28 - Aug. 1, 2025: [Applied Inverse Problems 2025](#) (AIP 2025), in Rio de Janeiro, Brazil
- Aug. 18 - December. 19, 2025: [Kinetic Theory: Novel Statistical, Stochastic and Analytical Methods](#), at the Simons Laufer Mathematical Sciences Institute in Berkeley, California.
- Sept. 1 - 5, 2025: [European Conference on Numerical Mathematics and Advanced Applications](#) (ENUMATH 2025) in Heidelberg, organized by Barbara Wohlmuth among others
- Sept. 14 - 20, 2025: [Hirschegg Workshop](#), in the Kleinwalsertal, Austria, organized by Ferdinand Thein and Gerald Warnecke
- Sept. 24 - 26, 2025: [Workshop on Hyperbolic Problems](#), in Nürnberg, organized by Emil Wiedemann and Nicola De Nitti
- November 17 - 20, 2025: [SIAM Conference on Analysis of Partial Differential Equations](#) (PD25), Pittsburgh, Pennsylvania, USA
- December 6 - 8, 2025: Workshop on Active Flux, in Shenzhen, China, organized by Rémi Abgrall and Alexander Kurganov
- sometime in **2026**: Finite Volume and Complex Applications 11, in Münster, Germany
- March 23 - 27, 2026: [Hyperbolic problems - a comprehensive approach](#), in Würzburg, Germany, organized by Wasilij Barsukow, Simon Markfelder, Marlies Pirner, Fritz Röpke, Emil Wiedemann
- May 25 - 29, 2026: 20th International Conference on Hyperbolic Problems (HYP2026): Theory, Numerics and Applications, in Stuttgart, Germany organized by Maja Lukacova und Christian Rhode



view from Kathrin's office at Caltech with the San Gabriel mountains in the background.