

# NEWSLETTER

## of the Work Group Mathematical Fluid Mechanics

*Newsletter no. 21 (2021)*

### visit to Oberwolfach one week ago

One week ago Kathrin Hellmuth and myself attended an Oberwolfach workshop on hyperbolic problems that was part of a German-Chinese exchange program. All participants from China attended via Zoom.

Kathrin lectured on "*Inverse problems for kinetic equations: applications to chemotaxis*", I lectured on "Kinetic modeling of dilute gas mixtures".

### Our seminar series via Zoom continues



Remi Abgrall

Last academic year we ran a *series of weekly Zoom lectures* on *Hyperbolic Problems* with international guests. It was well received. This academic year I will continue this weekly series Fridays at 3 pm. Among the speakers will be:

- Remi Abgrall (Zürich)
- David Ketcheson (Saudi Arabia)
- Lorenzo Pareschi (Ferrara, Italy)
- Francis Filbet (Toulouse, France)
- Dmitri Kuzmin (Dortmund)
- Walter Boscheri (Ferrara, Italy)
- Raphael Loubère (Bordeaux, France)

Remi Abgrall will be the first lecturer on Friday, Sept. 24 at 3 pm.



## Farah Kanbar will attend a workshop in the Alps

Farah Kanbar this upcoming week will attend a [Workshop on](#)

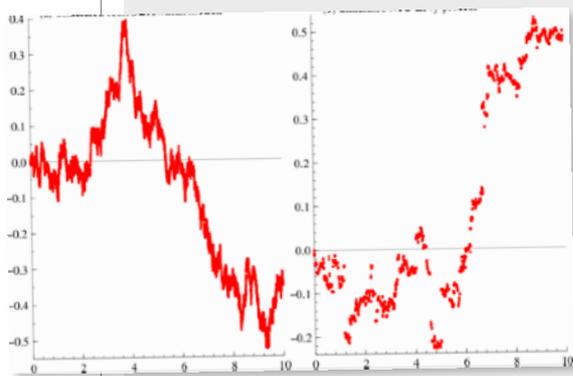
the Kleinwalsertal, where Farah's workshop will take place



[Conservation Laws](#) organized among others by Gerald Warnecke in the beautiful Kleinwalsertal in the Alps. She will give a lecture, see the schedule of the workshop [here](#).

## New Bachelor-thesis student

Marvin Raab began his Bachelor thesis with our work group. He plans to work on Levy processes in the context of math finance.



realization of Brownian motion (left) vs. a Levy process (right)

## Upcoming scientific conferences

Go ahead and click the links to check where you might want to participate.

### 2021:

- Sept. 12 - 18: [Hirscheegg Workshop On Conservation Laws](#) in Kleinwalsertal in Austria, organized among others by Gerald Warnecke

### 2022:

- Jan. 10 - 14, 2022: [Workshop on tissue growth and movement](#), at the Poincaré Institute in Paris, co-organized by Perthame

- Jan. 10 - June 24, 2022: [Frontiers in kinetic theory: connecting microscopic to macroscopic scales - KineCon 2022](#), a one semester program organized at the Newton Institute at Cambridge University with 5 one week workshops in this time

- March 7 - 11, 2022: [Perspectives on Multiphase Fluid Dynamics, Continuum Mechanics and Hyperbolic Balance Laws](#) in Luminy near Marseille, France, organized among others by Dumbser and Warnecke

- March 14 - 18, 2022: [SIAM Conference on Analysis of Partial Differential Equations](#) in Berlin, organized by Sid Mishra and Emil Wiedemann

- May 16 - 20, 2022: [The Boltzmann Equations: in the trail of Torsten Carlemann](#), near Stockholm, Sweden

- April 4 - 8, 2022: [HIGH ORDER NONLINEAR NUMERICAL METHODS FOR EVOLUTIONARY PDEs: THEORY AND APPLICATIONS \(HONOM\)](#) in Braga, Portugal, organized by Raphael Loubère und Stephane Clain

- April 10 - 15, 2022: [Structure preserving discretizations](#), in Oberwolfach, organized by Bruno Despres, Michael Dumbser, myself

- May 25 - 29, 2022: [Sharing Higher-order Advanced Research Know-how on Finite Volume \(SHARK-FV\)](#) in Portugal, organized by Raphael Loubère und Stephane Clain (still in its planning stage)

- June 5 - 9, 2022: [ECCOMAS congress](#) (ECCOMAS = European Community on Computational Methods in Applied Sciences), in Oslo

- June 20 - 25: [HYP2022: 18th International Conference on Hyperbolic Problems, Theory, Numerics, Applications](#) - Part 2 (formerly HYP 2020), in Malaga, Spain, organized by Carlos Pares

- July 18 - 22, 2022: [When Kinetic Theory meets Fluid Mechanics](#), Zürich

- Sept. 5 - 9, 2022: [10th International Conference on Numerical Methods for Multi-Material Fluid Flow \(MULTIMAT 2021\)](#) in Zürich, organized by Remi Abgrall