NEWSLETTER

of the Work Group Mathematical Fluid Mechanics

Newsletter no. 12 (2022)

Summer school in the Dolomites

Lena Baumann participated in the summer school *"Numerical methods for kinetic equations"* (June 19 - 24) given by Eric Sonnendrücker and Lukas Einkemmer in the Dolomites, part of the Italian alps. Her PhD project is closely associated with the speakers, so this was a great chance for her.

Lena Baumann in front of the well known mountain range "Drei Zinnen" in the Dolomites.

Conference on Hyperbolic Problems HYP2022 in Malaga

The *Conference on Hyperbolic Probems* in Malaga, Spain, June 19 - 25, was attended by 265 scientist, about 80 of which were PhD students. There were 15 invited speakers and about 220 contributed talks. For many it was their first large conference after Corona, giving it a bit of a celebratory mood.

Group photo of the HYP2022 conference.

For a higher resolution picture *see here*

Seated in the front is Phil Roe.

XVIII International Conference on Hyperbolic Problems
Theory, Numerics, Applications

The Springer Prize to the Best PhD Contributed Talk (Applications)

has been awarded to

Kathrin HELLMUTH

by her talk titled

Kinetic equations and inverse problems: an application to chemotaxis

Springer

Among the 80 contributed talks from PhD students the best presentation in three categories were selected by a panel including the invited speakers and the scientific committee. Kathrin Hellmuth was selected to be the best talk in her category. Congratulations!

Part of our extended work group attending HYP2022: Marlies Pirner, Claudius Birke, myself, Kathrin Hellmuth, Simon Markfelder, Wasilij Barsukow.

SIAM CSE 2023

Among the SIAM conferences, the *"SIAM Conference on Computational Sciences and Engineering"* is their largest meeting, with typically more than 2000 participants. It is dominated by a large number of contributed mini-symposia, among which are excellent contributions.

The next SIAM CSE will be held Feb 26 - March 3, 2023 in Amsterdam, *click here*. For the invitation by the Dutch organizers, *see here*.

There still is time to contribute a talk or propose a mini-symposium.

Upcoming scientific conferences

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

- July 18 - 22, 2022: *When Kinetic Theory meets Fluid Mechanics*, in Zürich, organized among others by Alexis Vasseur

- July 25 - 29, 2022: *2nd IST Austrian Summer School in Analysis and PDEs*, with Felix Otto and László Székelyhidi as lecturers

- Aug. 22 - 26, 2022: *10th International Conference on Numerical Methods for Multi-Material Fluid Flow (MULTIMAT 2021)* in Zürich, organized by Remi Abgrall and others

- Sept. 12 - 14, 2022: *Nils Henrik Risebro birthday conference* in Oslo, organized among others by Fjordholm, Holden, Mishra

- Sept. 26 - 30, 2002: *Horizons in non-linear PDEs*, a ***summer school*** in Ulm, organized by Emil Wiedemann and others

- Oct. 9 - 14, 2022: *Computation of hyperbolic and related PDEs: A conference in honor of Remi Abgrall*, organized by Sid Mishra at ETH Zurich on Monte Verità (Ascona, Switzerland)

- Sept.. 19 - 23, 2022: *12th European Conference on Mathematical and Theoretical Biology* in Heidelberg, organized by Anna Marciniak (Heidelberg) and others

- Nov. 7 - 10, 2022: "Numerical Methods for the Kinetic Equations of Plasma Physics" (NumKin 2022) in Garching (near Munich), organized by Eric Sonnendrücker (*webpage* of the last NumKin in 2020)

- Nov. 14 - 18, 2022: *Research School on Kinetic Theory*, in Luminy (near Marseille, France), organized by José Carillo, Markus Schmittchen and others

- Feb. 26 - March 3, 2023: *SIAM Conference on Computational Sciences and Engineering or SIAM CSE23*, held in Amsterdam, organized among others by Hans deSterck

- March 29 - 31, 2023: *4th European conference on Non-equilibrium gas flows*, in Eindhoven, Netherlands

- May, 2023 (either 8-12 or 22-26): *Sharing Higher-order Advanced Research Know-how on Finite Volume (SHARK-FV)* in Portugal, organized by Raphael Loubère and others