NEWSLETTER

of the Work Group Mathematical Fluid Mechanics

8th newsletter

Andrea Thomann's defense on Dec. 1

Andrea Thomann's defense will take place via video conference on Tuesday, Dec. 1 at around 4 pm. The title of her thesis is <u>"Numerical methods for allspeed flows for the Euler equations</u> <u>including well-balancing of source</u> terms".

Good luck, Andrea!

Send an email to <u>Andrea</u> and ask her for the link for the video conference.

Lukas Krines submitted his Bachelor thesis

Lukas Krines this week submitted his Bachelor thesis "Numerik stochastischer Wärmeleitungsgleichungen", where he studied a stochastic version of the heat equations both theoretically and numerically.



The numerical solution of the stochastic heat equation with boundary conditions that vary stochastically around zero. Notice that despite the stochastic forcing at the boundary we see that dissipation wins. (*taken from Lukas Krines' thesis*)

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Upcoming scientific conferences in 2021

Here is a list of conferences that might be of interest for some of you. Because of Covid, many of these conferences are still in their planning stage. Still I encourage you to click the links and check, where you may want to participate.

- Jan. 11 - 15: <u>WCCM-ECCOMAS 2020</u>: World Congress on Computational Methods, online.

- March 1 - 5: Oberwolfach: <u>Hyperbolic Balance Laws: modeling,</u> <u>analysis, and numerics</u>, organized among others by Remi Abgrall and Maria Lukacova

- March 1 - 5, <u>SIAM Conference on Computational Science and</u> <u>Engineering</u>, online

- March: Special program on Numerical Methods for Nonlinear Hyperbolic PDEs; at SUSTech, Shenzhen, China: organized by Alex Kurganov (still in its planning stage)

- March 22- 26: <u>Kinetic Equations: From Modeling, Computation to</u> <u>Analysis</u>, in Marseille, France, organized by Shi Jin (still in its planning stage)

- March 22 - 26: <u>HIGH ORDER NONLINEAR NUMERICAL METHODS</u> FOR EVOLUTIONARY PDEs: THEORY AND APPLICATIONS (HONOM) in Braga, Portugal, organized by Raphael Loubère und Stephane Clain

- April: <u>Nils-Henrik Risebro's birthday conference</u> in Oslo, Norway (still in its planning stage)

- May: <u>Sharing Higher-order Advanced Research Know-how on Finite</u> <u>Volume (SHARK-FV)</u> in Portugal, organized by Raphael Loubère und Stephane Clain (still in its planning stage)

- June 21 - 24: <u>SIAM Conference on Mathematical & Computational</u> Issues in the Geosciences (GS21), in Milan, (still in its planning stage)

- June 28 - July 2: <u>18th International Conference on Hyperbolic</u> <u>Problems, Theory, Numerics, Applications</u> (HYP 2020), (still in its planning stage)

- July 6 - 10: <u>International Conference on Spectral and Higher Order</u> <u>Methods</u> ICOSAHOM 2020, Vienna (still in its planning stage)

- Sept. 6 - 10: <u>10th International Conference on Numerical Methods</u> <u>for Multi-Material Fluid Flow (MULTIMAT 2021)</u> in Zürich, organized by Remi Abgrall