

NEWSLETTER

of the Work Group Mathematical Fluid Mechanics

7th newsletter

News on papers submitted

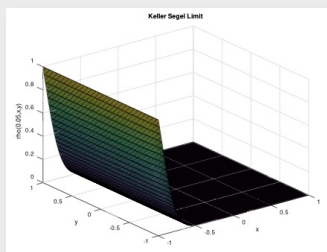
This paper was been [submitted](#) to a journal this week:

- Hellmuth, K.; Klingenberg, C.: "Computing Black Scholes with uncertain volatility - a machine learning approach", submitted (2020) [view PDF](#)



Fridolin Popov submits his Bachelor thesis

Fridolin Popov has submitted his bachelor thesis "*On the motion of cells - a mathematical approach*", where he studied the chemotaxis and Keller-Siegel model both theoretically and numerically.



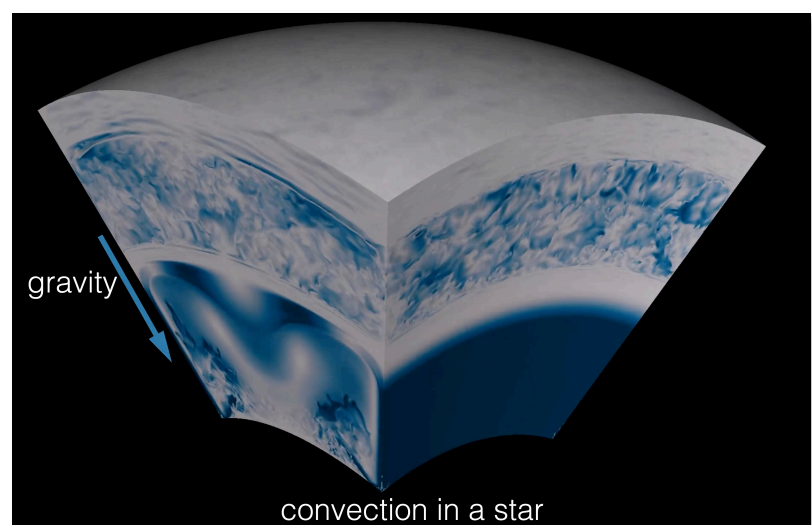
Numerical verification of the asymptotic preserving scheme for the kinetic chemotaxis model to the Keller-Siegel model.

Jonas Berberich's defense on Dec. 18

On Friday, Dec. 18 at 2 pm Jonas Berberich will defend his thesis titled "*Fluids in Gravitational Fields - Well-Balanced Modifications for Astrophysical Finite-Volume Codes*" [view here](#). The examiners will be Komla Domelevo, Praveen Chandrashekar (via Zoom) and myself. Marlies Pirner will record the minutes.



It will be possible to attend his defense in person, but you need to sign up ahead of time.



Numerical simulation of a convection in a star with the astrophysics SLH code by Fritz Röpke's work group using algorithms developed in Jonas Berberich's thesis.