

## Curriculum vitae of Ondřej Kreml

- February 26, 1983: born in Šumperk
- 1997 - 2001: Mikuláš Koperník gymnasium in Bílovec, class with extended education of mathematics
- 2001 - 2006: undergraduate studies at the Faculty of Mathematics and Physics, Charles University in Prague, mathematical modeling, diploma thesis "Axially symmetric flow of a viscous newtonian fluid", supervisor Milan Pokorný
- 2005 - 2011: teaching at the Faculty of Mathematics and Physics, Charles University in Prague - exercises of mathematical analysis
- May 2006: winner of the czech-slovak competition SVOČ in the category "mathematical analysis"
- 2007 - 2010: Ph.D. student at the Faculty of Mathematics and Physics, Charles University in Prague, mathematical modeling, PhD thesis "Mathematical analysis of models for viscoelastic fluids", supervisor Milan Pokorný
- 2010 - present: postdoc position at Institute of Mathematics, Academy of Sciences of the Czech Republic
- 2012 - 2013: 12 months postdoc position at University of Zurich, working on project SCIEX 11.152

### Longer academic stay:

- October 2012 - January 2013, May 2013 - December 2013: University of Zurich, Switzerland, working on project SCIEX 11.152

### Shorter academic stays:

- November 2008: University of Warsaw, Poland
- June 2009, November 2010: Technical University, Darmstadt, Germany
- February 2010: Institute of Mathematics and Its Applications, University of Minnesota, Minneapolis, USA
- July 2013: Max Planck Insititute, Leipzig, Germany

## LIST OF PUBLICATIONS

- [1] Kreml, O.; Pokorný, M.: *A regularity criterion for the angular velocity component in axisymmetric Navier-Stokes equations*. Electron. J. Differential Equations 2007, No. 08, 10 pp. (electronic).
- [2] Kreml, O.: *Mathematical Results for Some Models of Viscoelastic Fluids*. In **WDS'07 Proceedings of Contributed Papers: Part III Physics** (eds. J. Safrankova and J. Pavlu), Prague, Matfyzpress, 198–203, 2007.
- [3] Kreml, O.; Pokorný, M.: *On the local strong solutions for a system describing the flow of a viscoelastic fluid*. Nonlocal and abstract parabolic equations and their applications, 195–206, Banach Center Publ., **86**, Polish Acad. Sci. Inst. Math., Warsaw, 2009.
- [4] Kreml, O.; Pokorný, M.: *On the local strong solutions for the FENE dumbbell model*. Discrete Contin. Dyn. Syst. Ser. S **3** (2010), no. 2, 311–324.
- [5] Konieczny, P.; Kreml, O.: *On the 3D steady flow of a second grade fluid past an obstacle*. J. Math. Fluid Mech. **14** (2012), no. 2, 295–309.
- [6] Feireisl, E., Karper, T., Kreml, O., Stebel, J.: *Stability with respect to domain of the low Mach number limit of compressible viscous fluids*. Mathematical Models and Methods in Applied Sciences **23** (2013), no. 13, 2465–2493.

- [7] Kreml, O.; Nečasová, Š.; Pokorný, M.: *On the steady equations for compressible radiative gas*. Z. Angew. Math. Phys. **64** (2013), no. 3, 539–571.
- [8] Feireisl, E.; Kreml, O.; Nečasová, Š.; Neustupa, J.; Stebel, J.: *Weak solutions to the barotropic Navier-Stokes system with slip boundary conditions in time dependent domains*. J. Differential Equations **254** (2013), no. 1, 125–140.
- [9] Feireisl, E.; Kreml, O.; Nečasová, Š.; Neustupa, J.; Stebel, J.: *Incompressible limits of fluids excited by moving boundaries*. SIAM J. Math. Anal. **46** (2014), no. 2, 1456–1471
- [10] Chiodaroli, E.; De Lellis, C.; Kreml, O.: *Global ill-posedness of the isentropic system of gas dynamics*. To appear in Comm. Pure Appl. Math., published online, DOI: 10.1002/cpa.21537
- [11] Chiodaroli, E.; Feireisl, E.; Kreml, O.: *On the weak solutions to the equations of a compressible heat conducting gas*. To appear in Ann. Inst. H. Poincaré Anal. Non Linéaire, published online, DOI: 10.1016/j.anihpc.2013.11.005
- [12] Chiodaroli, E.; Kreml, O.: *On the Energy Dissipation Rate of Solutions to the Compressible Isentropic Euler System*. Arch. Rational Mech. Anal. **214** (2014) 1019–1049
- [13] Feireisl, E.; Kreml, O.: *Uniqueness of rarefaction waves in multidimensional compressible Euler system*, Preprint (2014).
- [14] Feireisl, E.; Kreml, O.; Mácha, V.; Nečasová, Š.: *On the low Mach number limit of compressible flows in exterior moving domains*, Preprint (2014).
- [15] Kreml, O.; Pokorný, M.; Šalom, P.: *On the global existence for a regularized model of viscoelastic non-newtonian fluid*, Preprint (2014).