

CURRICULUM VITAE

Matteo Caggio

PERSONAL DATA

Born March 11, 1986, Ferrara, Italy.

RESEARCH INTEREST

Navier-Stokes equations.

EDUCATION

2011: M.Sc. in Physics, University of Ferrara.

CURRENT POSITION

Ph.D. student in Applied Mathematics at University of West Bohemia, Pilsen.

Student – employer at the Institute of Mathematics of Czech Academy of Science (Prague) under the supervision of Prof. Šárka Nečasová.

Research activity: Compressible Navier-Stokes equations and related problems.

PAPERS

Inviscid, incompressible limits for rotating fluids (in preparation).

The rotating Navier-Stokes-Fourier-Poisson system on thin domains (in preparation).

CONFERENCES WITH CONTRIBUTION TALK

Singular PDEs, Analytical Tools and Applications (Male Ciche, Poland, 23 – 27/06/2015) – talk: Inviscid, incompressible limits for rotating fluids.

Two Days for Young Researchers in Fluid Dynamics (Darmsdtadt, Germany, 18 – 19/06/2015) – talk: Inviscid, incompressible limits for rotating fluids.

Other conferences

Topical Problems of Fluid Mechanics (Institute of Thermomechanics, Prague, Czech Republic, 11 – 13/02/2015).

Classical problems and new trends in mathematical fluid dynamics (Mathematical Department University of Ferrara, Italy, 29/09/2014 – 03/10/2014).

Regularity theory for elliptic and parabolic systems and problems in continuum mechanics (Telč, Czech Republic, 01 – 03/05/2014).

Topical Problems of Fluid Mechanics (Institute of Thermomechanics, Prague, Czech Republic, 19 – 21/02/2014).

Colloquium on Fluid Dynamics (Institute of Thermomechanics, Prague, Czech Republic, 23 – 25/10/2013).

Navier-Stokes Equations (Institute of Mathematics RWTH University of Aachen, Germany, 21 – 24/05/2013).

Navier-Stokes Equations (Institute of Mathematics RWTH University of Aachen, Germany, 29/05/2012 – 01/06/2012).

Consortium for Small-Scale Modeling meeting, Centro Alti Studi della Difesa (CASD), Rome, Italy, 05 – 09/09/2011).

Consortium for Small-Scale Modeling meeting (Academy of Sciences, Moscow, Russia, 06 – 10/09/2010).

SCHOOLS

Mathematical theory in fluid mechanics (Kacov, Czech Republic, 22 – 29/05/2015).

Autumn School and Workshop (Bad Boll, Germany, 27 – 30/10/2014).

Particles in Flows, workshop and summer school (Institute of Mathematics, Academy of Sciences of the Czech Republic, Prague, 25 – 31/08/2014).

International Winter School on Mathematical Fluid Dynamics (Levico Terme, Trento, Italy, 16 – 21/12/2012).

VISITS

University Paris-Est, Créteil (16 – 20/12/2015): Turbulence in fluids (lecture at university).

Humboldt University, Berlin (17 – 22/02/2014): Mathematical models of turbulence (discussion on physical and mathematical issues).

Additional activities

Czech Technical University, Prague, Czech Republic (from January 2016): Conditional regularity of incompressible Navier-Stokes equations in the whole space (research activity).

BHAITECH Advanced Vehicle Centre, Padova, Italy (May – June 2013): Racing line optimization (project).

Mathematics Department, University of Ferrara, Italy (February – September 2012): Navier-Stokes equations and theory of turbulence (activity proposal).

National Research Council (CNR) Bologna, Italy (March - September 2011): Analysis of turbulence in the atmospheric surface layer (activity proposal).

Deutscher Wetterdienst (DWD), Offenbach, Germany (May 2011): Turbulence-schema modifications in the meteorological model COSMO (activity proposal).

ARPA - SIMC Bologna, Italy (November 2010 – January 2011): Turbulence in the atmospheric boundary layer (internship).

ARPA - SIMC Bologna, Italy (April – July 2008): Limited-area ensemble forecasts of windstorms over Northern Europe (project) – publication: Generation of limited-area ensemble system targeted for Northern Europe: a case study of wind gust (joint work with Andrea Montani).