

Curriculum Vitae

Sebastian Schwarzacher

Personalia

Family name, First name:	Schwarzacher, Sebastian
Researcher unique identifiers:	ORCID: 0000-0003-2415-1172, Scopus: 51864654900 Researcher ID: V-8567-2019, MR Author ID: 956465
Date of birth:	24th July 1984
Nationality:	Austria
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Main research areas

Nonlinear partial differential equations (analysis for weak solutions), 30 publ.
Fluid dynamics (fluid-structure interaction, compressible and non-Newtonian fluids), 11 publ.
Analysis for numerics for PDEs (Galerkin methods, convergence rates), 3 publ.
Analysis of evolutionary non-linear PDEs (variable domains, intrinsic geometry), 17 publ.

Education

27.07.2018	Habilitation for associate professor in Italy.
14.10.2013	PhD thesis, (Grade: <i>summa cum laude</i>) Ludwig Maximilian University Munich, (Germany).
24.08.2010	Diploma in Mathematics at the University of Freiburg

Employment

Jan. 2017–	Charles University, Prague, Faculty of Mathematics and Physics, Current position: Assistant Professor.
2017–2018	University of Bonn, Inst of Appl. Math., Scientific Assistant.
2014–2016	Charles University, Prague, (Czech Rep.), Faculty of Math. and Phys., Post-doctoral fellow.
2010–2014	Ludwig Maximilian University Munich, (Germany), Scientific Assistant

Grants & Awards

2021–2026	ERC-CZ Grant INTERACT LL2105 (Czech Ministry), Principal Investigator. Funding for 5 years, includes 3 postdoc positions and 2 PhD positions.
2019–2021	Primus grant PRIMUS/19/SCI/01 (University grant), Principal Investigator. Funding for 3 years.
2019–2021	GAČR grant GJ17–01694Y (national), Principal Investigator. Funding for 3 years.
Jan. 2018–	UNCE/SCI/023, University centre (MathMAC), scientific member.
Jun. 2017	Visiting grant from the Univ. of Florence for 1 month.
2016–2017	ERC-CZ project MORE, LL1202, scientific member.
Oct. 2014	PhD thesis awarded with the <i>Carathéodory-Preis</i> of the LMU Munich
Jun. 2014	Awarded with a <i>Leopoldina-Postdoc-Stipendium</i> , (not accepted).
Sep. 2011	Diploma thesis awarded with the <i>Alumni-Preis</i> of the University of Freiburg

Organisation of scientific meetings:

Hausdorff School: Modeling and analysis of evolutionary problems in materials science at the University of Bonn in Sept. 2019.

Brijuni Applied Mathematics Workshop 2021 at Brijuni National Park, July 2021.

- **Supervision of graduate students and postdoctoral fellows:**

Currently *two postdocs* (M. Kampschulte and G. Sperone) and *two PhD students* (A. Cesik and C. Mindrila) are under my supervision. Other members of my group: B. Benesova (senior staff), K. Tuma (senior staff), B. She (Postdoc), J. Fara (PhD). *Previous Postdocs:* J. Burczak (now at Univ. Leipzig), M. Sroczinskis (now at Univ. Konstanz), G. Gravina (now at Temple Univ.). Supervision of *three master students* that continued in academia with *theses including original research:* (C. Mindrila 2017/18, K. Kowalczyk and A. Cesik 2018/2019). Two Bachelor students (2021).

- **Teaching** Lectures (17), seminars (11) and mentorings (2) for Bachelor and Master students from mathematics and economics. Supervision of three Master Students (C. Mîndrilă 2017/18, K. Kowalczyk and A. Češík 2018/2019). All continue in academia (A. Češík & C. Mîndrilă in Prague and K. Kowalczyk at Univ. Bonn) and all three theses include original research for which publications are in preparation; e. g. the thesis of C. Mîndrilă and K. Kowalczyk lead to the submission of Preprints. One co-supervision (T. Scharle, now PhD at Univ. of Oxford) led to a publication.

- **Lectures at workshops and conferences** (selection):

Invited speaker at the (online) Birs workshop: *Nonlinear Potential Theoretic Methods in Partial Differential Equations*, (Banff, Canada 2021)

Plenary speaker at the *INdAM Meeting on "Geometric Properties for Parabolic and Elliptic PDE's"*, (Palazzone in Cortona, Italy 2019)

Invited speaker to the *Workshop on Analytic-Geometric inequalities and related Topics* and to the *Workshop on Nonlinear Parabolic PDEs*, (Institute Mittag Leffler, Sweden, 2018 and 2019).

Plenary speaker to the *GAMM-Workshop on the Analysis of PDE*, (Stuttgart, Germany 2018)

Invited speaker to the *Workshop on Nonlinear Parabolic PDEs*, (Institute Mittag Leffler, Sweden, 2019)

Invited speaker at the *FSDONA 2019*, (Turku, Finland)

Invited speaker at the workshop *Geometric Measure Theory and Free Boundary Problems*, (Hausdorff Research Institute of Mathematics, Germany, 2019)

Invited speaker at the *Nonlinear Flows: Entropy methods, dissipative systems, and applications*, (Erwin Schrödinger Inst., Austria, 2016)

As PhD student lectures at the *Math. Research Inst. Oberwolfach* (Germany, 2013), *Institute Mittag Leffler* (Sweden, 2013) and the *Banach Center Bedlewo* (Poland, 2012).

- **Invited seminar talks:** At several institutions including *Univ. of Oxford*, *Univ. of Warwick*, *Heriot Watt Univ. Edinburgh*, *Univ. of Bonn*, *TU Munich*, *MPI Leipzig*, *Univ. of Warsaw*, *National Univ. Seoul*, *Univ. of Florence*, *IST Austria*, *Univ. of Vienna*.

- **32 accepted publications** in scientific peer reviewed journals. Including the *Arch. Ration. Mech. Anal.* (3×), *Amer. J. Math.*, *J. Math. Pures Appl.*, *Anal. & PDE*, *Siam J. Math. Anal.* (2×), *Siam J. Numer. Anal.*, *Annal. l'Inst. Hen. Poinc. (C)* (2×), *Jour. of Funct.*, *Trans. of AMS*, *Math. Mod. Meth. Appl. Sci.* (3×), *Calc. Var. & PDE* (3×), *Numer. Math.*, *J. Diff. Eq.* (4×).

- **Reviewing activities** (Selection): *Analysis und PDE*, *Ann. Mat. Pura ed Appl.*, *Bull. Lond. Math. Soc.*, *IMA J. Num. Anal.*, *J. Math. Fluid Mech.*, *J. Fluid Mech.*, *Math. Nachrichten*, *Monatshefte der Mathematik*, *NoDea*, *Nonlin. Anal.*, *SIAM J. on Math. Anal.*

- **Further achievements:** Appointment proposal: Offer for Associate Prof. at Univ. of Uppsala. Rank 3 for a W2 Professorship at the Univ. of Erlangen-Nurnberg and member of the appointment proposal for a full Professorship at the Univ. of Insbruck.