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Citizenship: German

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EMPLOYMENT

2021 – now Technical University of Munich, Germany
W3 Associate Professorship (tenured)

2016 – now Technical University of Munich, Germany
Lichtenberg Professor for “Multiscale and Stochastic Dynamics”

2016 – 2021 Technical University of Munich, Germany
W2 Assistant Professorship (tenure-track)

2011 – 2016 Vienna University of Technology, Austria
Institute for Analysis and Scientific Computing
Postdoctoral Researcher (in the research group: PDE and Dynamical Systems)
2013 - 2016: APART Fellow - Austrian Academy of Sciences
2011 - 2013: Marie-Curie International Re-Integration Grant

2013 Mathematisches Forschungsinstitut Oberwolfach (MFO), Germany
Leibniz Fellow

2010 – 2011 Max Planck Institute for Physics of Complex Systems, Germany
Postdoctoral Researcher (in the research group: Biological Networks)

EDUCATION

2016 Vienna University of Technology, Austria
Privatdozent (Priv.-Doz.) “venia docendi”
Habilitation in Applied Mathematics

2008 – 2010 Cornell University, United States of America
Doctor of Philosophy (PhD) in Applied Mathematics 2010
Advisor: Professor John Guckenheimer

2006 – 2008 Cornell University, United States of America
Master of Science (MSc) in Applied Mathematics 2008
Average Grade 4.0 [4.0=best, 0.0=worst]

2005 – 2006 University of Cambridge, United Kingdom
Certificate of Advanced Study (CASM) 2006
(**Master of Advanced Studies (MASt)** in Mathematics)

2002 – 2005 Jacobs University Bremen, Germany
Bachelor of Science (BSc) in Mathematics 2005
Average grade 1.1 [1.0=best, 5.0=worst]

1994 – 2001 Cato Bontjes van Beek-Gymnasium Achim, Germany
Abitur 2001
Average grade 1.0 [1.0=best, 6.0=worst]

AWARDS & GRANTS (PROFESSOR LEVEL)

- 2022: Distinguished Visiting Professorship
Foundation Sciences Mathématiques de Paris
recipient C. Kuehn (2 months between August-October 2022)
- 2022 - 2024: "Validated Computation of Patterns in Recurrent Neural Networks"
project within the Walter-Benjamin Program of DFG
PI E. Queirolo, host C. Kuehn
- 2021 - 2026: JSPS Joint International Research (B)
international host in collaboration with Japan; PI Prof. Goro Akagi
- 2021 - 2024: Henriette Hertz Scouting Program
Alexander von Humboldt-Stiftung
PI, allowed to scout and propose three Humboldt Fellows directly
- 2021 - 2024: "Multiscale Dynamics of Neural Nets via Stochastic Graphops"
project within DFG SPP 2298: Theoretical Foundations of Deep Learning
PI C. Kuehn, co-PI M. Engel
- 2021 - 2024: Lichtenberg Professorship Grant Extension
PI, VolkswagenStiftung
- 2021 - 2024: "Quasi-Steady State Approximation for PDEs"
D-A-CH grant: Austrian Science Fond (FWF) & German Science Foundation (DFG)
PI C. Kuehn, co-PIs T. Bao. and K. Fellner
- 2021 - 2023: AvH Humboldt Research Fellowship
awarded to postdoctoral fellow Dr. Chuang Xu
host C. Kuehn
- 2021 - 2023: Marie-Curie Postdoctoral Fellowship
postdoc Dr. Cinzia Soresina, (declined due to longer term position in Graz)
host C. Kuehn
- 2021 - 2024: Innovative Training Networks - Project CriticalEarth
Call Horizon 2020 - MSCA-ITN-2019/2020
co-PI C. Kuehn
- 2020 - 2023: "Geometric Desingularization of Higher Codimension Singularities
in fast-slow systems", DFG, international partner: H. Jardon-Kojakhmetov
PI
- 2020 - 2022: "Dynamics of Self-Adapting Networks"
Call "Corona Crises and Beyond" VolkswagenStiftung
PI, Lichtenberg Add-on
- 2020 - 2024: "Geometric Desingularization of Non-Hyperbolic Equilibria in Iterated Maps"
DFG Collaborative Research Center SFB/TR 109
PI for project B10, co-PI Y. Suris
- 2020 - 2023: "Dynamics of Contact Processes on Simplicial Complexes"
within DFG SPP 2265: Random Geometric Systems
PI C. Kuehn, co-PI N. Gantert
- 2020 - 2022: DAAD Prime Fellowship
awarded to postdoc Dr. Maximilian Engel
host C. Kuehn at TUM; declined due to group leader offer to M. Engel
- 2020 - 2021: TUM Foundation Fellowship
awarded to postdoc Dr. Chuang Xu
host C. Kuehn
- 2020 - 2023: "Synchronization in Co-Evolutionary Network Dynamics"
TUM International Graduate School of Science and Engineering
PI C. Kuehn, co-PI E. Martens (DTU)

- 2020 - 2021: John-von-Neumann Professorship
Recipient: Professor Martin Rasmussen; postponed due to COVID
host C. Kuehn
- 2019 - 2021: EuroTech Postdoctoral Fellowship
awarded to postdoc Dr. Iacopo Longo
host C. Kuehn
- 2019 - 2020: TUM Global Incentive Fund Grant
Collaboration grant / funding for a joint TUM-ICL workshop
PI
- 2019 - 2021: Hans Fischer Senior Fellowship (Prof Krasimira Tsaneva-Atanasova)
TUM Institute for Advanced Study
PI C. Kuehn
- 2019: Teaching Award - Fachschaft Mathematik at TUM
3rd place; lecture: Nonlinear Dynamics
selected by the students for excellence in teaching
- 2019 - 2021: Hans Fischer Fellowship (Dr Christian Bick)
TUM Institute for Advanced Study
PI C. Kuehn
- 2019 - 2023: Project TiPES (Tipping Points in the Earth System)
European Union, Call: H2020-LC-CLA
PI & WP-leader (seven WPs total)
- 2019 - 2021: EuroTech Postdoctoral Fellowship
awarded to postdoc Dr. Cinzia Soresina
host C. Kuehn
- 2020 - 2024: ANR project "PERISTOCH"
scientific leader C. Kuehn; PI N. Berglund (Univ. Orleans)
- 2019: John-von-Neumann Professorship
Recipient: Professor Grigorios A. Pavliotis
host C. Kuehn
- 2019 - 2020: AvH Humboldt Research Fellowship
awarded to postdoc Dr. Hildeberto Jardon-Kojakhmetov
host C. Kuehn
- 2019 - 2021: EuroTech Postdoctoral Fellowship
awarded to postdoc Dr. Hildeberto Jardon-Kojakhmetov (declined due to AvH)
host C. Kuehn
- 2018 - 2019: TUM Foundation Fellowship
awarded to postdoc Dr. Hildeberto Jardon-Kojakhmetov
host C. Kuehn
- 2017 - 2020: "Analysis of PDEs with Cross-Diffusion and Stochastic Driving"
D-A-CH Individual Project Grant DFG & FWF
PI, co-PI N. Zamponi
- 2017 - 2021: "Geometric Desingularization of Non-Hyperbolic Equilibria in Iterated Maps"
DFG Collaborative Research Center SFB/TR 109
PI for project B10, co-PI Y. Suris
- 2017: Richard-von-Mises Prize
International Association of Applied Mathematics and Mechanics (GAMM)
- 2017 - now: Complexity Science Hub Vienna, Austria
External Faculty Fellow

- 2016: Best Paper Award for 2015 (with F. Achleitner)
Faculty of Mathematics & Geoinformation, Vienna University of Technology
(for F. Achleitner & C. Kuehn, Adv. Diff. Eq., Vol. 20, No. 9-10, pp. 887-936, 2015)
- 2016 - 2019: "Critical Transitions and Systemic Risk in Socio-Economic Network Dynamical Systems"
Austrian Science Fond (FWF) project grant
PI, co-PI S. Thurner, transferred to MedUni Wien
- 2016 - 2021: "Nonlinear Multiscale Dynamical Systems"
Lichtenberg Professorship Grant, VolkswagenStiftung
PI, only four grants awarded in 2015 across all sciences

AWARDS & GRANTS (POST-DOCTORAL LEVEL)

- 2015 - 2018: Innovative Training Networks - Project CRITICS
Call Horizon 2020 - MSCA-ITN-2014
associated member, 24 total participants
- 2013: Best Paper Award for 2012
Faculty of Mathematics & Geoinformation, Vienna University of Technology
(for C. Kuehn, SIAM Journal on Scientific Computing, 34(3), pp. A1635-A1658, 2012)
- 2013 - 2016: "Predictability and Continuation of Multiscale Systems"
APART Fellowship - Austrian Academy of Sciences (ÖAW)
PI
- 2013: Leibniz Fellowship
Mathematisches Forschungsinstitut Oberwolfach (MFO)
PI, 10 weeks fully financed research stay at MFO
- 2011 - 2013: "Singularly Perturbed Dynamical Systems"
European Commission Marie-Curie Re-integration Grant
PI, hosted by: P. Szmolyan, TU Vienna
- 2011: DAAD travel grant to attend ICIAM 2011
PI

AWARDS & GRANTS (PRE-DOCTORAL LEVEL)

- 2010: Travel grant for conference: "The 8th AIMS conference"
- 2010: Travel grant for conference: "Emerging Topics in DS & PDE"
- 2010: Travel grant for conference: "Stochastic Models in the Neurosciences"
- 2009: SIAM Certificate for "outstanding efforts and accomplishment"
(for my role in the SIAM Chapter at Cornell University)
- 2008 - 2010: Three travel grants by the Cornell Graduate School
- 2007: SIAM Contest DSWeb 2007 - Winner
- 2007: Grant for workshop: "Nonlinear Evolution Equations and Dynamical Systems"
- 2007: Selection & Grant for "AARMS Summer School 2007"
- 2006: JSS Scholarship & Travel Grant to attend the 16th Jyväskylä Summer School
- 2005 - 2006: Partial Bursary - Cambridge European Trust
- 2005: Selection & Grant for "AARMS Summer School 2005"
- 2004, 2005: President's List Jacobs University Bremen
(awarded for a grade point average of 1.5 or better [1.0=best,5.0=worst], my GPA was 1.1)
- 2002 - 2005: Merit-based scholarship - Jacobs University Bremen

ORGANIZATION & SERVICE

- 2022 - 2025: Associate Editor
“SIAM Journal on Applied Dynamical Systems” (SIADS)
- 2022 - 2025: Associate Editor
“Partial Differential Equations and Applications” (PDEA)
- 2021: Organization (jointly with H. Jardon-Kojakhmetov) of a mini-symposium
Title: *Multiple Time Scale Dynamics and Applications* (4 talks)
at the Dynamics Days Europe (Nice, France)
- 2021: Organization (jointly with I. Longo) of a mini-symposium
Title: *Nonautonomous Bifurcation Theory* (4 talks)
at the Dynamics Days Europe (Nice, France)
- 2021: Organization (with M. Beck, M. Chirilus-Bruckner, J. Rademacher) of a workshop
Title: *Dynamics of Patterns* (25 talks)
at the Mathematisches Forschungsinstitut Oberwolfach [MFO] (Oberwolfach, Germany)
- 2021: Conference organizer (with C. Bick, K. Tsaneva-Atanasova)
Conference: *Theory of Network Dynamics* (10 talks)
at TUM Institute for Advanced Study (Munich, Germany)
- 2021: Workshop organizer (jointly with M. Engel and A. Neamtu)
Workshop on *Methods in Stochastic Dynamics* (16 talks)
at Complexity Science Hub Vienna (Vienna, Austria)
- 2021: Organization (jointly with E. Martens) of a mini-symposium
Title: *Synchronization Dynamics in Networks* (4 talks)
at the SIAM Conference on Applications of Dynamical Systems (online event)
- 2020 - now: Co-initiator & scientific committee member
One World Dynamics Seminar
- 2020 - now: Vice-Speaker “Elitestudiengang TopMath”
- 2020 - now: Scientific Director “Imperial - TUM Mathematical Sciences Hub”
- 2020: Organization (jointly with H. Jardon-Kojakhmetov) of a mini-symposium
Title: *Fast-Slow Systems* (4 talks)
at the Dynamics Days Europe (Nice, France); conference cancelled
- 2020: Organization (jointly with M. Gnann) of a mini-symposium
Title: *Stochastic Pattern Dynamics* (8 talks)
at the SIAM NWCS Conference (Bremen, Germany); conference cancelled
- 2020-2021: Advisory Board for SIAM DS-group (elected by community vote)
- 2020: Organization (jointly with G. Pavliotis) of a mini-symposium
Title: *Bifurcations and Uncertainty Quantification* (8 talks)
at the SIAM UQ Conference (Garching, Germany); conference cancelled
- 2020: Workshop organizer
TUM ICL Mathematics Workshop (10 talks, approx. 40 participants)
at TUM Department of Mathematics (Munich, Germany)
- 2019-2022: Focus Group Leader for “Network Dynamics”
jointly with: C. Bick and K. Tsaneva-Atanasova
TUM Institute for Advanced Study (IAS)
- 2019: Organization (jointly with M. Cicalese) of the SFB/TR109-TopMath-ISAM Summer School
Title: *Multiscale Phenomena in Geometry and Dynamics* (1 week school, 16 two-hour lectures)
at the Technical University Munich (Munich, Germany)
- 2019: Organization (jointly with B. Gentz) of a mini-symposium
Title: *Stochastic Dynamics* (8 talks)
at the Equadiff Conference (Leiden, Netherlands)

- 2019: Organization (jointly with H. Jardon Kojakhmetov) of a mini-symposium
Title: *New Directions in Multiple Time Scale Dynamics* (8 talks)
at the SIAM Conference on Applications of Dynamical Systems (Snowbird, US)
- 2018 - now: Mentor for Elitestudiengang "Theoretical Mathematical Physics"
- 2018: Organization (jointly with Y. Suris) of a mini-symposium
Title: *Structure Preservation in Discrete Dynamics* (3 talks)
at the Discretization in Geometry and Dynamics Conference (Berlin, Germany)
- 2018 - now: Chair of Doctoral Examination Commissions
(2018) Daniel Stilck Franca
(2019) Jonas Latz
(2020) Niklas Behringer
- 2018: Conference organizer (with N. Berglund, A. Debussche, F. Delarue)
Stochastic Partial Differential Equations (approx. 30 talks)
at Centre International de Rencontres Mathématiques (Marseille, France)
- 2018: Workgroup TUM/TU-Wien Organizer
Fractional Laplacian: Numerics, Analysis, Dynamics (5 talks)
at Technical University of Munich (Garching, Germany)
- 2017: Head of TopMath Examination Board (independent studies exams)
- 2017: Workshop organizer (jointly with L. Horstmeyer and S. Thurner)
Workshop on Adaptive Networks (8 talks)
at Complexity Science Hub Vienna (Vienna, Austria)
- 2017 - now: Entrance Committee Member, Mathematics in Science and Engineering at TUM
- 2017 - now: Various selection panels for TopMath students
- 2017 - now: TopMath Independent Studies Examiner
(2017) L. Arcidiacono, M. Forster, N. Schilling.
(2018) L. Arcidiacono, T. Böhle, M. Forster, D. Hien, N. Schilling.
(2019) M.E. Gonzalez.
(2021) G. Zucal.
(2022) G. Chisuole.
- 2017: Organization (jointly with D. Blömker) of a mini-symposium
Title: *Stochastic Dynamics* (4 talks)
at the SIAM Conference on Applications of Dynamical Systems (Snowbird, US)
- 2016 - now: Steering Board Member, TUM Elitestudienprogramm TopMath
- 2015: Conference organizer (jointly with F. Hubalek)
Austrian Stochastics Days (18 talks)
at Vienna University of Technology (Vienna, Austria)
- 2015: Organization (jointly with J. Rademacher) of a mini-symposium
Title: *Dynamics of Patterns* (8 talks)
at the DMV Annual Meeting (Hamburg, Germany)
- 2015: Organization (jointly with D. Avitabile and H. Uecker) of a mini-symposium
Title: *Frontiers in Numerical Continuation Methods* (8 talks)
at the SciCADE Conference (Potsdam, Germany)
- 2015: Organization (jointly with M. Wolfrum) of a mini-symposium
Title: *Coupled Oscillators and their Mean-Field Dynamics* (8 talks)
at the Equadiff Conference (Lyon, France)
- 2014: Organization of a mini-workshop
Title: *Fluids, Dynamics and Differential Equations* (2 talks)
at Vienna University of Technology (Vienna, Austria)

- 2014: Organization (jointly with B. Sandstede) of a mini-symposium
Title: *Stochastic Partial Differential Equations and Patterns* (4 talks)
at the SIAM Conference on Nonlinear Waves and Coherent Structures (Cambridge, UK)
- 2013: Organization of a mini-symposium
Title: *Numerical Methods for Stochastic Dynamical Systems* (4 talks)
at the SIAM Conference on Applications of Dynamical Systems (Snowbird, US)
- 2011: Organization (jointly with S. Hallerberg & H. Kantz) of a mini-symposium
Title: *Dynamics of Critical Transitions and Extreme Events* (4 talks)
at the Dynamics Days Europe (Oldenburg, Germany)
- 2011: Organization (jointly with J. Sieber) of a mini-symposium
Title: *Prediction of Noisy Slow-Fast Critical Transitions* (8 talks)
at the SIAM Conference on Applications of Dynamical Systems (Snowbird, US)
- 2009: Established SIAM Student Chapter at Cornell University
- 2008-2010: Initiated and organized the “Graduate Student Applied Dynamical Systems Seminar” at Cornell University

REVIEWING

- Reviewer (journals):
 - Acta Applicandae Mathematicae
 - Acta Biotheoretica
 - Advances in Complex Systems
 - Advances in Difference Equations
 - AIP Advances
 - American Naturalist
 - Annals of Applied Probability
 - Annals of Probability
 - Applied Mathematical Modelling
 - Applied Mathematics and Computation
 - Applied Mathematics Letters
 - Bioinformatics and Biology Insights
 - Boundary Value Problems
 - Bulletin of Mathematical Biology
 - Chaos: An Interdisciplinary Journal of Nonlinear Science
 - Climate Dynamics
 - Communications in Mathematical Physics
 - Communications in Nonlinear Science and Numerical Simulation
 - Computational Science & Discovery
 - Computer Methods and Programs in Biomedicine
 - Computers and Mathematics with Applications
 - Discrete and Continuous Dynamical Systems Series B
 - Discrete and Continuous Dynamical Systems Series S
 - Earth System Dynamics
 - Ecological Complexity
 - European Biophysics Journal
 - European Physical Journal B
 - European Physical Journal Plus
 - European Physics Letters
 - Fluctuation and Noise Letters

- Frontiers in the Life Sciences
- IEEE Transactions on Circuits and Systems
- IEEE Transactions on Network Science and Engineering
- International Journal of Bifurcation and Chaos
- International Journal of Neural Systems
- International Journal of Nonlinear Sciences and Numerical Simulation
- Journal of Applied Analysis
- Journal of Computational and Applied Mathematics
- Journal of Computational Dynamics
- Journal of Dynamics and Differential Equations
- Journal of Differential Equations
- Journal of Mathematical Analysis and Applications
- Journal of Mathematical Biology
- Journal of Mathematical Neuroscience
- Journal of Nonlinear Science
- Journal of Physics A: Mathematical and Theoretical
- Journal of Physics: Conference Series
- Journal of Statistical Mechanics
- Journal of the Royal Society Interface
- Kinetic & Related Models
- Letters in Mathematical Physics
- Mathematical Biosciences
- Mathematical Biosciences and Engineering
- Mathematical Methods in the Applied Sciences
- Mathematical Modelling and Analysis
- Mathematical Modelling of Natural Phenomena
- Mathematics (AIMS)
- Mathematics and Computers in Simulation
- Mathematics and Mechanics of Solids
- Mathematische Nachrichten
- Memoirs of the American Mathematical Society
- New Journal of Physics
- Nonlinear Analysis A: Theory, Methods & Applications
- Nonlinear Differential Equations and Applications NoDEA
- Nonlinear Dynamics
- Nonlinearity
- Numerical Algorithms
- PLoS One
- Philosophical Transactions of the Royal Society A
- Physica A: Statistical Mechanics and its Applications
- Physica D: Nonlinear Phenomena
- Physical Review E
- Physical Review X
- Physics Letters A
- Probability, Uncertainty and Quantitative Risk
- Proceedings of the National Academy of Sciences, India A
- Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences

- Royal Society Open Science
- Scientific Reports
- SIAM Journal on Applied Dynamical Systems
- SIAM Journal on Applied Mathematics
- SIAM Journal on Mathematical Analysis
- SIAM Multiscale Modeling and Simulation
- SIAM Review
- Stochastics
- Theoretical Ecology
- Theoretical Population Biology
- Zeitschrift für Angewandte Mathematik und Physik
- Reviewer (books):
 - Springer Mathematics - Applied Mathematical Sciences
 - Springer Mathematics - Monographs
 - Springer Physics - Edited Volumes
- Reviewer (funding agencies & institutes):
 - Alexander von Humboldt Foundation, Germany
 - Agence Nationale de la Recherche (ANR), France
 - Banff International Research Station, Canada
 - Croatian Science Foundation (CSF), Croatia
 - Deutsche Forschungsgemeinschaft (DFG), Germany
 - Dynasty Foundation, Russia
 - German Academic Exchange Service (DAAD), Germany
 - Israel Science Foundation (ISF), Israel
 - National Science Centre (NCN), Poland
 - Natural Sciences and Engineering Research Council (NSERC), Canada
 - Netherlands Organisation for Scientific Research (NWO), Netherlands
 - Research Foundation Flanders (FWO)
 - Studienstiftung des deutschen Volkes, Germany
 - TUM SFB/TR 109 Internal Proposals, Germany
- External reviewer - dissertations & theses:
 - 2017 Dr. Marius Yamakou, University of Leipzig / MPI-MIS
 - 2018 M.Sc. Kevin Höhle, TUM (M.Sc. thesis, Department of Physics)
 - 2020 Dr. Jichen Yang, University of Bremen
 - 2020 Dr. Günter Schneckenreither, TU Wien
 - 2020 Dr. Christian Aarset, University of Klagenfurt

MENTORING

- Postdoctoral Researcher: Maxime Breden
- Postdoctoral Researcher: Maximilian Engel
- Postdoctoral Researcher: Manuel Gnann
- Postdoctoral Researcher: Leonhard Horstmeyer (jointly with S. Thurner)
- Postdoctoral Researcher: Felix Hummel
- Postdoctoral Researcher: Hildeberto Jardón-Kojakhmetov

- Postdoctoral Researcher: Samuel Jelbart
- Postdoctoral Researcher: Konstantin Clauß
- Postdoctoral Researcher: Iacopo Longo
- Postdoctoral Researcher: Kerstin Lux
- Postdoctoral Researcher: Jan Mölter
- Postdoctoral Researcher: Chris Münch (jointly with M. Brokate)
- Postdoctoral Researcher: Alexandra Neamtu
- Postdoctoral Researcher: Elena Queirolo
- Postdoctoral Researcher: Nada Sissouno (main mentor F. Krahmer)
- Postdoctoral Researcher: Cinzia Soresina
- Postdoctoral Researcher: Sebastian Throm
- Postdoctoral Researcher: Chuang Xu
- Doctoral Student: Luca Arcidiacono
- Doctoral Student: Paolo Bernouzzi
- Doctoral Student: Tobias Böhle
- Doctoral Student: Marios Gkogkas
- Doctoral Student: Maria Elena Gonzalez Herrero
- Doctoral Student: Annalisa Iuorio (main mentor: P. Szmolyan)
- Doctoral Student: Valérian Jaques-Dumas (main mentor: H. Dijkstra)
- Doctoral Student: Sara-Viola Kuntz
- Doctoral Student: Lucia Layritz (main mentors: Anja Rammig)
- Doctoral Student: Anne Pein
- Doctoral Student: Sacha Sinnet (main mentors: H. Dijkstra and A. von der Heydt)
- Doctoral Student: Maximilian Steinert
- Doctoral Student: Pia Steinmeyer (jointly with N. Gantert)
- Doctoral Student: Lara Trussardi (main mentor: A. Jüngel)
- Doctoral Student: Andreas Widder (main mentor: V. Veliov)
- Master Student: Luca Arcidiacono
- Master Student: Dylan Bansard-Tresse (jointly with M. Engel)
- Master Student: Tobias Böhle
- Master Student: Andreas Burkhart (jointly with H. Jardon)
- Master Student: Gideon Chisuole (jointly with N. Gantert)
- Master Student: Matteo Cirachi (TMP mentor)

- Master Student: Stefanie Ecker (jointly with M.E. Gonzalez Herrero)
- Master Student: Noémie Ehstand (jointly with C. Soresina)
- Master Student: Katharina Eichinger (jointly with A. Neamtu)
- Master Student: Manuel Fuchsberger (jointly with M. Scherer)
- Master Student: Margaret Lane (jointly with C. Soresina)
- Master Student: Marios Gkogkas (jointly with M. Engel)
- Master Student: Maria Elena Gonzalez Herrero
- Master Student: Tobias Jawecki
- Master Student: Michael Klausz (jointly with K. Glau)
- Master Student: Ekin Su Köksal (jointly with K. Lux)
- Master Student: Hana Krakovská (jointly with I. Longo)
- Master Student: Harsha Kumar (jointly with H. Jardon)
- Master Student: Sara-Viola Kuntz (jointly with S. Jelbart)
- Master Student: Verena Lachner (jointly with F. Hummel)
- Master Student: Polina Lakrisenko (jointly with M. Breden)
- Master Student: Pascal Lehner
- Master Student: Merlin Pelz (jointly with M. Silber)
- Master Student: Johannes Piller (jointly with M. Engel)
- Master Student: Francesco Romano
- Master Student: Maximilian Schemel (jointly with K. Clauß)
- Master Student: Elisabeth Schiessler (jointly with A. Jüngel)
- Master Student: Andreas Scheibner (jointly with F. Hummel and S. Jelbart)
- Master Student: Daniela Schlager (jointly with K. Clauß)
- Master Student: Frieder Simon (jointly with P. Szmolyan)
- Master Student: Edrick Solís González (jointly with J. Mölter)
- Master Student: Maximilian Steinert
- Master Student: Thomas Steinhofer (jointly with M. Engel)
- Master Student: Pia Steinmeyer (jointly with M. Engel)
- Master Student: Jacopo Vittadello (jointly with I. Longo)
- Master Student: Julian Westermeier
- Master Student: Antoine Wolff (jointly with M. Breden)
- Master Student: Dominik Worf
- Master Student: Giulio Zucal

- Bachelor Student: Luca Arcidiacono
- Bachelor Student: Philippe Biberich
- Bachelor Student: Tobias Böhle
- Bachelor Student: Stefanie Ecker
- Bachelor Student: Maria Elena Gonzalez
- Bachelor Student: Haowen Guan
- Bachelor Student: Ekin Su Köksal (jointly with A. Pein)
- Bachelor Student: Sara-Viola Kuntz (jointly with M. Engel)
- Bachelor Student: Verena Lachner
- Bachelor Student: Marina Lex
- Bachelor Student: Matthias Niller
- Bachelor Student: Aleksandr Solodovnik (jointly with M. Steinert)
- Bachelor Student: Julian Streit
- Bachelor Student: Maximilian Windsheimer (jointly with L. Arcidiacono)

TEACHING (AS A PROFESSOR)

2021 – 2022	Research Sabbatical - TUM
2021 – 2022	Oberseminar: “Dynamics” - TUM
2021	Hauptseminar: “Nonautonomous Dynamical Systems” - TUM
2021	Lecture: “Dynamical Systems” - TUM
2021	Oberseminar: “Dynamics” - TUM
2020 – 2021	Oberseminar: “Dynamics” - TUM
2020	Lecture: “Gewöhnliche Differentialgleichungen” - TUM
2020	Oberseminar: “Dynamics” - TUM
2019 – 2020	Lecture: “Analysis 3 für Elektrotechnik” - TUM
2019 – 2020	Oberseminar: “Dynamics” - TUM
2019	Lecture: “Gewöhnliche Differentialgleichungen” - TUM
2019	Oberseminar: “Dynamics” - TUM
2018 – 2019	Lecture: “Case Studies in Mathematical Modelling” - TUM
2018 – 2019	Lecture: “Introduction to Nonlinear Dynamics” - TUM
2018 – 2019	Hauptseminar: “Chaos & Chance” - TUM
2018 – 2019	Oberseminar: “Dynamics” - TUM
2018	Lecture: “Dynamical Systems” - TUM
2018	Oberseminar: “Dynamics” - TUM

- 2018 (Pro-)Seminar: "Network Science" - TUM
- 2018 Invited Lecturer: Winter School CRITICS (Wöltingerode, Germany)
- 2017 – 2018 Lecture: "Introduction to Nonlinear Dynamics" - TUM
- 2017 – 2018 Hauptseminar: "Topics in Dynamical Systems" - TUM
- 2017 – 2018 Oberseminar: "Dynamics" - TUM
- 2017 Lecture: "Dynamical Systems" - TUM
- 2017 Oberseminar: "Dynamics" - TUM
- 2017 (Pro-)Seminar: "Introduction to Network Dynamics" - TUM
- 2017 – now Module Responsibility: Dynamics - TUM
- 2017 – now Mathematische Grundlagenprüfung - TUM
- 2016 – 2017 Lecture: "Interactions between Dynamics and PDE" - TUM
- 2016 Invited Lecturer: School on Multistability and Tipping (Dresden, Germany)

TEACHING (AS A POSTDOC)

- 2015 Seminar (jointly with M. Melenk): "Computational Stochastic PDE" - TU Vienna
- 2015 Invited Lecturer: MURPHYS-HSFS Spring School (Levico Terme, Italy)
- 2015 Invited Lecturer: School on Dynamics of Multilevel Systems (MPI-PKS, Dresden)
- 2014 – 2015 Lecture: "Dynamical Systems and Partial Differential Equations" - TU Vienna

TEACHING & WORK EXPERIENCE (AS A STUDENT)

- 2007 – 2010 Graduate Research Assistant - Cornell University
- 2007 Teaching Assistant Trainer - Cornell University
- 2006 – 2007 Teaching Assistant - Cornell University
Math191 Calculus for Engineers
Math424 Fourier Series and Wavelets
Math428 Partial Differential Equations
- 2005 Student Assistant - Jacobs University Bremen
- 2004 – 2005 Teaching Assistant - Jacobs University Bremen
2nd-year undergraduate course: Numerical Methods
- 2004 Internship - ONVIDA GmbH (Duisburg, Germany)
- 2003 Internship - EADS Space Transportation (Bremen, Germany)

SELECTED PLENARY TALK

- 2017 GAMM Annual Meeting (Weimar, Germany)
"Multiscale Dynamics near Instability"

INVITED TALKS (* = UPCOMING)

- 2022 * Université Paris Dauphine, Analysis Seminar (Paris, France)
- 2022 * SIAM Conference on Nonlinear Waves and Coherent Structures (Bremen, Germany)
- 2022 * SIAM Conference on Life Sciences (Pittsburgh, USA)
- 2022 * Computational Methods in Applied Mathematics CMAM-9 (Vienna, Austria)
- 2022 * Workshop on Ecological Dynamics (Leiden, Netherlands)
- 2022 * Analysis Seminar University of Erlangen (Erlangen, Germany; online)
- 2022 * Dynamics Days US (USA; online)
- 2021 Mathematical Biology Seminar (University of Iowa, USA; online)
- 2021 Seminar Stochastics Uni Leipzig (Leipzig, Germany; online)
- 2021 DMV-ÖMG Annual Meeting (Passau, Germany; online)
- 2021 Workshop on Diffusive Systems (Edinburgh, UK; online)
- 2021 Dynamics Days Europe (Nice, France; online)
- 2021 SIAM Applied Dynamical Systems Conference (online)
- 2021 SN PDE Seminar (online)
- 2021 Nonlinear Meeting 2021 (online)
- 2020 DMV Annual Meeting (Chemnitz, Germany; online)
- 2020 Critical Transitions in Complex Systems (Shanghai, China; online)
- 2020 Dynamical Systems Applied to Biology and Natural Sciences (Trento, Italy)
- 2020 Max Planck Institute MIS, Seminar (Leipzig, Germany)
- 2019 7th Viennese Vintage Workshop (Vienna, Austria)
- 2019 CSH Workshop on Higher-Order Networks (Vienna, Austria)
- 2019 TiPES Opening Workshop (Paris, France)
- 2019 Seminar Radboud University Nijmegen (Nijmegen, Netherlands)
- 2019 ENUMATH 2019 (Egmond aan Zee, Netherlands)
- 2019 Seminar TU Delft (Delft, Netherlands)
- 2019 New Mathematical Methods for Complex Systems in Ecology (Banff, Canada)
- 2019 International Congress of Industrial and Applied Mathematics (Valencia, Spain)
- 2019 Equadiff [2 talks] (Leiden, Netherlands)
- 2019 Heriot Watt University Math-Bio Colloquium (Edinburgh, UK)
- 2019 SIAM Applied Dynamical Systems Conference (Snowbird, USA)
- 2019 Santa Fe Institute Colloquium (Santa Fe, USA)
- 2019 GAMM Annual Meeting (Vienna, Austria)

- 2019 Oberseminar Dynamical Systems Uni Stuttgart (Stuttgart, Germany)
- 2018 Workshop on Nonlinear Stochastic Evolution Equations (Berlin, Germany)
- 2018 Mathematisches Kolloquium Universität Innsbruck (Innsbruck, Austria)
- 2018 Discretization in Geometry and Dynamics Conference (Berlin, Germany)
- 2018 Control of Self-Organizing Nonlinear Systems (Warnemünde, Germany)
- 2018 Dynamics Days Europe [2 talks] (Loughborough, UK)
- 2018 Workshop on Stochastic Population Models on Networks (Garching, Germany)
- 2018 Mathematisches Kolloquium Universität Klagenfurt (Klagenfurt, Austria)
- 2018 Conference on Mathematics of Wave Phenomena (Karlsruhe, Germany)
- 2018 Seminar Talk: Technical University of Munich (Munich, Germany)
- 2018 Mathematisches Kolloquium Universität Bremen (Bremen, Germany)
- 2018 SFB 1114: Scaling Cascades in Complex Systems (Berlin, Germany)
- 2018 SFB/TR 109 Introductory Seminar (Munich, Germany)
- 2018 Complexity Science Hub Vienna Annual Meeting (Vienna, Austria)
- 2018 Prediction of Transitions in Complex Systems (Dresden, Germany)
- 2018 GAMM Annual Meeting [2 talks] (Munich, Germany)
- 2018 Extremes2018 Conference (Hannover, Germany)
- 2017 IRTG 2235: Analysis of Singular and Random Systems (Bielefeld, Germany)
- 2017 Workshop on Random Dynamical Systems (Leiden, Netherlands)
- 2017 Joint Analysis Seminar Augsburg-München (Munich, Germany)
- 2017 GAMM PDE-AG Workshop (Eindhoven, Netherlands)
- 2017 Austrian Stochastics Days (Salzburg, Austria)
- 2017 DMV-ÖMG Annual Meeting [2 talks] (Salzburg, Austria)
- 2017 5th CliMathNet Conference (Reading, UK)
- 2017 Equadiff (Bratislava, Slovakia)
- 2017 European Nonlinear Dynamics Conference [3 talks] (Budapest, Hungary)
- 2017 Dynamical Systems and Geometric Mechanics Conference (Munich, Germany)
- 2017 SIAM Conference on Applications of Dynamical Systems (Snowbird, USA)
- 2017 SFB/TR 109 PI-Seminar, TU Munich (Munich, Germany)
- 2017 Rough Paths and SPDE Seminar, TU Berlin (Berlin, Germany)
- 2017 Langenbach Seminar, WIAS Berlin (Berlin, Germany)
- 2017 Fractional Differential Equations Mini-Workshop (Munich, Germany)
- 2017 GAMM Annual Meeting, UQ Section (Weimar, Germany)

- 2017 Antrittsvorlesung / Hurwitz-Seminar, TU Munich (Munich, Germany)
- 2016 SFB/TR 109, Annual Meeting (Berlin, Germany)
- 2016 Workshop on Multistability and Tipping, MPI-PKS (Dresden, Germany)
- 2016 Conference on Complex Systems (Amsterdam, Netherlands)
- 2016 Critical Transitions in Complex Systems Workshop (Kulhuse, Denmark)
- 2016 7th International Workshop on Set-Oriented Numerics (Berlin, Germany)
- 2016 ESI: Entropy methods, dissipative systems, and applications (Vienna, Austria)
- 2016 Mathematics Colloquium, University of Oldenburg (Oldenburg, Germany)
- 2016 ICBM Group Seminar, University of Oldenburg (Oldenburg, Germany)
- 2016 Haerendel Birthday Symposium (Bremen, Germany)
- 2016 Jacobs University Mathematics Colloquium (Bremen, Germany)
- 2015 Real Algebraic Geometry Seminar, University of Constance (Constance, Germany)
- 2015 Minisymposium on Multiscale and Stochastic Dynamics (Munich, Germany)
- 2015 MBI Workshop: Uncertainty, Sensitivity and Predictability (Columbus, USA)
- 2015 DMV Annual Meeting, Moment Problem Minisymposium (Hamburg, Germany)
- 2015 SciCADE, Molecular Dynamics Minisymposium (Potsdam, Germany)
- 2015 Dynamical Systems Seminar, Imperial College (London, UK)
- 2015 Applied Mathematics Colloquium, University of Nottingham (Nottingham, UK)
- 2015 Workshop on Dynamics of Multilevel Systems, MPI-PKS (Dresden, Germany)
- 2015 SIAM Conference on Applications of Dynamical Systems (Snowbird, USA)
- 2015 Joint Analysis Seminar Augsburg-München (Augsburg, Germany)
- 2015 GAMM-Workshop: Dynamik und Regelungstheorie (Hamburg, Germany)
- 2014 7th Workshop on Random Dynamical Systems (Bielefeld, Germany)
- 2014 Seminar Talk, TU Vienna (Vienna, Austria)
- 2014 Mathematics Colloquium, Jacobs University (Bremen, Germany)
- 2014 Workshop on Rhythms in Complex Networks at NBI (Copenhagen, Denmark)
- 2014 Control of Self-Organizing Nonlinear Systems (Warnemünde, Germany)
- 2014 SIAM Nonlinear Waves and Coherent Structures (Cambridge, UK)
- 2014 1st Spanish-Italian Mathematics Societies Meeting (Bilbao, Spain)
- 2014 8th European Nonlinear Dynamics Conference (Vienna, Austria)
- 2014 SFB/TR Discretization in Geometry and Dynamics - Seminar (Munich, Germany)
- 2014 Oberseminar Differentialgleichungen (Augsburg, Germany)
- 2014 IST Austria - Seminar (Klosterneuburg, Austria)

- 2014 MURPHYS-HSFS at WIAS (Berlin, Germany)
- 2014 ÖAW Mathematik-Informatik Workshop (Vienna, Austria)
- 2014 Max Planck Institute Symposium (Munich, Germany)
- 2014 Workshop on Infinite-Dimensional Stochastic Systems (Wittenberg, Germany)
- 2013 FAM Seminar at TU Vienna (Vienna, Austria)
- 2013 Workshop: Dynamic Models of Economic-Population Systems (Vienna, Austria)
- 2013 6th Workshop on Random Dynamical Systems (Bielefeld, Germany)
- 2013 DK Seminar - Dissipation and Dispersion in PDEs (Vienna, Austria)
- 2013 ICMS Workshop on Tipping Point Theory (Edinburgh, UK)
- 2013 Summer School: Numerical Methods for SDEs (Vienna, Austria)
- 2013 Max Planck Institute DS, Advances Seminar (Göttingen, Germany)
- 2013 Workshop on Fast-Slow Systems at CRM (Barcelona, Spain)
- 2013 SIAM Conference on Applications of Dynamical Systems (Snowbird, USA)
- 2013 University of Warwick Complexity Forum (Coventry, UK)
- 2013 University of Oldenburg ICBM Colloquium (Oldenburg, Germany)
- 2012 Patterns, Nonlinear Dynamics and Applications, PANDA (Bath, UK)
- 2012 University of Exeter, Dynamics Seminar (Exeter, UK)
- 2012 Workshop on Random Models in Neuroscience (Paris, France)
- 2012 Université d'Orléans, MAPMO Seminar (Orléans, France)
- 2012 Vienna University of Technology, Institute-Colloquium (Vienna, Austria)
- 2012 Tipping Points Seminar - Northwestern University (Online Meeting)
- 2012 Workshop on Critical Transitions in Complex Systems (London, UK)
- 2012 7th MathMod Conference (Vienna, Austria)
- 2011 Int. Workshop on Hysteresis and Slow-Fast Systems (Wittenberg, Germany)
- 2011 Max Planck Institute MIS, Dynamical Systems Seminar (Leipzig, Germany)
- 2011 Equadiff 2011, Singular Perturbations Minisymposium (Loughborough, UK)
- 2011 7th Int. Congress on Industrial and Applied Math. (Vancouver, Canada)
- 2011 Computational Methods in Dynamics (Trieste, Italy)
- 2011 Workshop on Generalized Modelling [CfD] (Dresden, Germany)
- 2011 Max Planck Institute - PKS Biophysics Seminar (Dresden, Germany)
- 2011 TU Chemnitz Nonlinear Dynamics Seminar (Chemnitz, Germany)
- 2010 Max Planck Institute - MIS Networks Meeting (Leipzig, Germany)
- 2010 Max Planck Institute - PKS Time Series Seminar (Dresden, Germany)

- 2010 4th Workshop on Random Dynamical Systems (Bielefeld, Germany)
- 2010 Max Planck Institute - PKS Networks Seminar (Dresden, Germany)
- 2010 University of Bielefeld, Numerics Seminar (Bielefeld, Germany)
- 2010 SIAM Emerging Topics in Dynamical Systems & PDEs (Barcelona, Spain)
- 2010 8th AIMS Conference (Dresden, Germany)
- 2010 Boston University, Dynamics Seminar (Boston, USA)
- 2010 Max Planck Institute - MIS (Leipzig, Germany)
- 2010 University of Bristol, BCANM Seminar (Bristol, UK)
- 2010 TU Vienna, Analysis and Scientific Computing Seminar (Vienna, Austria)
- 2010 FU Berlin, Nonlinear Dynamics Seminar (Berlin, Germany)
- 2009 Max-Planck Institute for Physics of Complex Systems (Dresden, Germany)
- 2009 Jacobs University, Geometry and Dynamics Seminar (Bremen, Germany)

CONTRIBUTED TALKS & POSTER PRESENTATIONS

- 2018 Oberseminar Dynamics (Munich, Germany)
- 2018 Munich-Vienna Fractional Meeting (Munich, Germany)
- 2016 Workshop on Numerics of SPDEs (Linz, Austria)
- 2015 DMV Annual Meeting (Hamburg, Germany)
- 2015 SciCADE (Potsdam, Germany)
- 2015 Equadiff (Lyon, France)
- 2014 3rd Austrian Stochastics Days (Leoben, Austria)
- 2014 SIAM Nonlinear Waves and Coherent Structures (Cambridge, UK)
- 2014 10th Austrian Numerical Analysis Days (Vienna, Austria)
- 2014 GAMM Annual Meeting (Erlangen, Germany)
- 2014 German Probability and Statistics Days (Ulm, Germany)
- 2012 TU Vienna - Graduate PDE Seminar, (Vienna, Austria)
- 2012 1st Austrian Stochastics Days, (Linz, Austria)
- 2012 Mathematical Physics of Complex Networks (Dresden, Germany)
- 2011 Dynamics Days Europe 2011 (Oldenburg, Germany)
- 2011 SIAM Conference on Applications of Dynamical Systems (Snowbird, USA)
- 2011 75th DPG Annual Meeting, (Dresden, Germany)
- 2010 Extremes 2010 Workshop, (Potsdam, Germany)
- 2010 Cornell University, Graduate Applied Dynamics Seminar (Ithaca, USA)
- 2009 Cornell University, Graduate Applied Dynamics Seminar (Ithaca, USA)

- 2009 Dynamics Days Europe (Göttingen, Germany)
- 2009 SIAM Conference on Applications of Dynamical Systems (Snowbird, USA) [Poster]
- 2009 Cornell University, Graduate Applied Dynamics Seminar (Ithaca, USA)
- 2009 Cornell University, Dynamical Systems Seminar (Ithaca, USA)
- 2008 Cornell University, Graduate Applied Dynamics Seminar (Ithaca, USA)
- 2008 10th Experimental Chaos Conference (Catania, Italy) [Poster]
- 2008 Cornell University, Dynamical Systems Seminar (Ithaca, USA)

SCIENCE COMMUNICATION & PROFESSIONAL DEVELOPMENT

- 2021–now *Youtube Channel*
Online science talks of ‘Multiscale and Stochastic Dynamics’ group
- 2021 TUM - press release
Topic: Universal equation for explosive phenomena
Coverage: Tipping Points in the Earth Systems website
Coverage: Informationsdienst Wissenschaft
Coverage: Department of Mathematics, TUM
- 2020 Fakultät Mathematik Website - press release
Topic: One World Dynamics Seminar launched
- 2020 Fakultät Mathematik Website - press release
Topic: Imperial College London / TUM Mathematical Sciences Hub launched
- 2019 TUM Graduate School “Kick-Off Seminar” (Raitenhaslach, Germany)
Keynote Speaker; lecture for beginning doctoral students
- 2019 Fakultät Mathematik Website - press release
Topic: TiPES - When does the climate change?
- 2019 TUM “Studieninformationstag” (Munich, Germany)
Invited Speaker / Workshop-Leader; mathematics for high-school students
- 2018 TUM Blog “Studium & Lehre” (Munich, Germany)
Invited interview for: *Nachgefragt*
- 2017 TUM Mathematics “Open House Event” (Munich, Germany)
Invited Speaker; lecture for the general public
- 2017 TUM Mathematics “Development Workshop” (Munich, Germany)
Invited Panelist; topic: presenting at conferences
- 2017 TUM “Schülertag” (Munich, Germany)
Invited Speaker / Workshop-Leader; mathematics for high-school students
- 2016 TU/Uni Vienna Doctoral School Workshop (Reichenau an der Rax, Austria)
Invited Speaker; topic: postdoc opportunities for doctoral students
- 2015–now Practical Science Blog - Founder/Writer
practicalscienceblog.wordpress.com
- 2014 Oxford University Press - invited blog
“Special events and the dynamical statistics of Twitter”

SUMMER SCHOOLS / SPECIAL WORKSHOPS (AS STUDENT/POSTDOC)

- 2013: Selected Participant - IdeaLab for Early Career Researchers
Institute for Computational and Experimental Research in Mathematics (ICERM, USA)
- 2007: Selected Participant - AARMS Summer School, (Dalhousie University, Canada)
Took two graduate-level courses
- 2007: Selected Participant - NEEDS School School/Workshop (Bellaterra, Spain)
Nonlinear Evolution Equations and Dynamical Systems
- 2006: Selected Participant - Jyväskylä Summer School (University of Jyväskylä, Finland)
Took two graduate-level courses
- 2005: Selected Participant - AARMS Summer School, (Dalhousie University, Canada)
Took two graduate-level courses

MEMBERSHIPS

- Complex Systems Society (CSS)
- Deutsche Mathematiker-Vereinigung (DMV)
- Member: Fachgruppe Stochastik
- Deutscher Hochschulverband
- European Mathematical Society (EMS)
- Gesellschaft für Angewandte Mathematik und Mechanik (GAMM)
- Activity group member: Dynamics and Control
- Activity group member: Partial Differential Equations
- Activity group member: Uncertainty Quantification
- Mathematics and Climate Research Network (MCRN)
- Österreichische Mathematische Gesellschaft (ÖMG)
- Society for Industrial and Applied Mathematics (SIAM)
- SIAG member: Analysis of Partial Differential Equations
- SIAG member: Dynamical Systems
- SIAG member: Life Sciences
- SIAG member: Nonlinear Waves and Coherent Structures
- SIAG member: Uncertainty Quantification

LANGUAGE SKILLS

English – fluent, French – working knowledge, German – mother tongue

COMPUTER SKILLS

- *Programming*: Python, C++, Fortran77, C, Pascal
- *Operating Systems*: MS Windows, Linux, Sun Solaris
- *Mark-Up Languages*: \LaTeX , html
- *Mathematical Software Packages*: Numpy/Scipy/Fenics, MatLab/Octave, Mathematica, Maple
- *Specialized Mathematical Software*: AUTO, MatCont, ESATAN, MCLite, PLTMG, pde2path
- *Other Software*: Dreamweaver, OpenOffice, MS Office, Fireworks, kompozer

BOOKS:

- B2 *"PDE Dynamics: An Introduction"*
C. Kuehn, 267 pages, SIAM, 2019
 in the series: Mathematical Modeling and Computation
- B1 *"Multiple Time Scale Dynamics"*
C. Kuehn, 814 pages, Springer, 2015
 in the series: Applied Mathematical Sciences

JOURNAL PUBLICATIONS (REFEREED):

- P06 *"A general view on double limits in differential equations"*
C. Kuehn, N. Berglund, C. Bick, M. Engel, T. Hurth, A. Iuorio and C. Soresina
 Physica D, accepted / to appear
- P04 *"Traveling wave dynamics for Allen-Cahn equations with strong irreversibility"*
 G. Akagi, **C. Kuehn** and K.-I. Nakamura
 Transactions of the American Mathematical Society, accepted / to appear
- P02c *"Multiscale analysis for traveling-pulse solutions to the stochastic FitzHugh-Nagumo equations"*
 K. Eichinger, M. Gnann and **C. Kuehn**
 Annals of Applied Probability, accepted / to appear
- P01 *"Uncertainty quantification of bifurcations in random ordinary differential equations"*
C. Kuehn and K. Lux
 SIAM Journal on Applied Dynamical Systems, accepted / to appear, 2021
- P02a *"Coupled hypergraph maps and chaotic cluster synchronization"*
 T. Böhle, **C. Kuehn**, R. Mulas and J. Jost
 EPL (Europhysics Letters), accepted / to appear, 2021
- P02f *"On the reliable and efficient numerical integration
 of the Kuramoto model and related dynamical systems on graphs"*
 T. Böhle, **C. Kuehn**, and M. Thalhammer
 International Journal of Computer Mathematics, accepted / to appear, 2021
- P07b *"Graphop mean-field limits for Kuramoto-type models"*
 M.-A. Gkogkas and **C. Kuehn**
 SIAM Journal on Applied Dynamical Systems, accepted / to appear, 2021
- P11d *"Controlling canard cycles"*
 H. Jardon Kojakhmetov and **C. Kuehn**
 Journal of Dynamical and Control Systems, accepted / to appear, 2021
- J89 *"A geometric analysis of the SIRS epidemiological model on a homogeneous network"*
 H. Jardon Kojakhmetov, **C. Kuehn**, A. Pugliese and M. Sensi
 Journal of Mathematical Biology, Vol. 83, No. 37, 2021
- J88 *"Connecting a direct and a Galerkin approach to slow manifolds in infinite dimensions"*
 M. Engel, F. Hummel and **C. Kuehn**
 Proceedings of the American Mathematical Society, Vol. 8, pp. 252-266, 2021

- J87 *"Rough center manifolds"*
C. Kuehn and A Neamtu
 SIAM Journal on Mathematical Analysis, Vol. 53, No. 4, pp. 3912-3957, 2021
- J86 *"Reduced models of cardiomyocytes excitability: comparing Karma and FitzHugh-Nagumo"*
 M.E. Gonzalez Herrero, **C. Kuehn** and K. Tsaneva-Atanasova
 Bulletin of Mathematical Biology, Vol. 83, 88, 2021
- J85 *"A qualitative mathematical model of the immune response under the effect of stress"*
 M.E. Gonzalez Herrero and **C. Kuehn**
 Chaos: An Interdisciplinary Journal of Nonlinear Science, Vol. 31, No. 6, 061104, 2021
- J84 *"Metastable speeds in the fractional Allen-Cahn equation"*
 F. Achleitner, **C. Kuehn**, M. Melenk and A. Rieder
 Applied Mathematics and Computation, Vol. 408, 126329, 2021
- J83 *"Homogenization of fully-coupled chaotic fast-slow systems via intermediate stochastic regularization"*
 M. Engel, M.-A. Gkogkas and **C. Kuehn**
 Journal of Statistical Physics, Vol. 183, No. 25, 2021
- J82 *"A random dynamical systems perspective on isochronicity for stochastic oscillations"*
 M. Engel and **C. Kuehn**
 Communications in Mathematical Physics, Vol. 386, No. 3, pp. 1603–1641, 2021
- J81 *"On the influence of cross-diffusion in pattern formation"*
 M. Breden, **C. Kuehn** and C. Soresina
 Journal of Computational Dynamics, Vol. 8, No. 2, pp. 213-240, 2021
- J80 *"Random attractors via pathwise mild solutions for stochastic parabolic evolution equations"*
C. Kuehn, A. Neamtu and S. Sonner
 Journal of Evolution Equations, Vol. 21, No. 2, pp. 2631-2663, 2021
- J79 *"A universal route to explosive phenomena"*
C. Kuehn and C. Bick
 Science Advances, Vol. 7, No. 16, eabe3824, 2021
- J78 *"Numerical continuation for fractional PDEs: sharp teeth and bloated snakes"*
 N. Ehstand, **C. Kuehn** and C. Soresina
 Communications in Nonlinear Science and Numerical Simulation, Vol. 98, 105762, 2021
- J77 *"A geometric analysis of the SIR, SIRS and SIRWS epidemiological models"*
 H. Jardon Kojakhmetov, **C. Kuehn**, A. Pugliese and M. Sensi
 Nonlinear Analysis: Real World Applications, Vol. 58, 103220, 2021
- J76 *"Global martingale solutions for quasilinear SPDEs via the boundedness-by-entropy method"*
 G. Dhariwal, F. Huber, A. Jüngel, **C. Kuehn** and A. Neamtu
 Annals de l'Institut Henri Poincaré (B) Probabilités et Statistiques, Vol. 57, No. 1, pp. 577602, 2021
- J75 *"Coupled dynamics on hypergraphs: master stability of steady states and synchronization"*
 R. Mulas, **C. Kuehn** and J. Jost
 Physical Review E, Vol. 101, No. 6, 062313, 2020

- J74 *"Random attractors for stochastic partly dissipative systems"*
C. Kuehn, A. Neamtu and A. Pein
 Nonlinear Differential Equations and Applications NoDEA, Vol. 27, 35, 2020
- J73 *"On fast-slow consensus networks with a dynamic weight"*
 H. Jardon Kojakhmetov and **C. Kuehn**
 Journal of Nonlinear Science, Vol. 30, pp. 2737-2786, 2020
- J72 *"Network dynamics on graphops"*
C. Kuehn
 New Journal of Physics, Vol. 22, 053030, 2020
- J71 *"Pathwise mild solutions for quasilinear stochastic partial differential equations"*
C. Kuehn and A. Neamtu
 Journal of Differential Equations, Vol. 269, No. 3, pp. 2185-2227, 2020
- J70 *"Computing invariant sets of random differential equations using polynomial chaos"*
 M. Breden and **C. Kuehn**
 SIAM Journal on Applied Dynamical Systems, Vol. 19, No. 1, pp. 577-618, 2020
- J69 *"Combined error estimates for local fluctuations of SPDEs"*
C. Kuehn and P. Kürschner
 Advances in Computational Mathematics, Vol. 46, No. 11, 2020
- J68 *"Numerical continuation for a fast-reaction system and its cross-diffusion limit"*
C. Kuehn and C. Soresina
 SN Partial Differential Equations and Applications, Vol. 1, No. 7, 2020
- J67 *"An adaptive voter model on simplicial complexes"*
 L. Horstmeyer and **C. Kuehn**
 Physical Review E, Vol. 101, No.2, 022305, 2020
- J66 *"Travelling waves in monostable and bistable stochastic partial differential equations"*
C. Kuehn
 Jahresbericht der Deutschen Mathematiker-Vereinigung, Vol. 122, No. 2, pp. 73-107, 2020
- J65 *"Sample paths estimates for stochastic fast-slow systems driven by fractional Brownian motion"*
 K. Eichinger, **C. Kuehn** and A. Neamtu
 Journal of Statistical Physics, Vol. 179, No. 5, pp. 1222-1266, 2020
- J64 *"Geometry and numerical continuation of multiscale orbits in a nonconvex variational problem"*
 A. Iuorio, **C. Kuehn** and P. Szmolyan
 Discrete and Continuous Dynamical Systems S, Vol. 13, No. 2, 2020
- J63 *"Random switching near bifurcations"*
C. Kuehn and T. Hurth
 Stochastics and Dynamics, Vol. 20, No. 2, 2050008, 2020
- J62 *"Mathematical analysis of nonlocal PDEs for network generation"*
 T. Böhle and **C. Kuehn**
 Mathematical Modelling of Natural Phenomena, Vol. 14, No. 5, 506, 2019

- J61 *"Discretized fast-slow systems near pitchfork singularities"*
 L. Arcidiacono, M. Engel and **C. Kuehn**
 Journal of Difference Equations and Applications, Vol. 25, No. 7, pp. 1024-1051, 2019
- J60 *"A survey on the blow-up method for fast-slow systems"*
 H. Jardon Kojakhmetov and **C. Kuehn**
 Contemporary Mathematics, AMS, accepted / to appear, 2019
- J59 *"A gradient flow formulation for the stochastic Amari model"*
C. Kuehn and J. Tölle
 Journal of Mathematical Biology, Vol. 79, No. 4, pp. 1227-1252, 2019
- J58 *"Power network dynamics on graphons"*
C. Kuehn and S. Throm
 SIAM Journal on Applied Mathematics, Vol. 79, No. 4, pp. 1271-1292, 2019
- J57 *"Smoluchowski's coagulation equation with forcing"*
C. Kuehn and S. Throm
 Nonlinear Differential Equations and Applications (NoDEA), Vol. 26, No. 3, 17, 2019
- J56 *"Discretized fast-slow systems near transcritical singularities"*
 M. Engel and **C. Kuehn**
 Nonlinearity, Vol. 32, No. 7, 2365, 2019
- J55 *"Multiscale Dynamics of an Adaptive Catalytic Network"*
C. Kuehn
 Mathematical Modelling of Natural Phenomena, Vol. 14, No. 4, 402, 2019
- J54 *"Rigorous Validation of Stochastic Transition Paths"*
 M. Breden and **C. Kuehn**
 Journal de Mathématiques Pures et Appliquées, Vol. 131, pp. 88-129, 2019
- J53 *"Duck traps: two-dimensional critical manifolds in planar systems"*
C. Kuehn and C. Münch
 Dynamical Systems: An International Journal, Vol. 34, No. 4, pp. 584-612, 2019
- J52 *"Pattern formation in the doubly-nonlocal Fisher-KPP equation"*
C. Kuehn and P. Tkachov
 Discrete and Continuous Dynamical Systems A, Vol. 39, No. 4, pp. 2077-2100, 2019
- J51 *"Towards sample path estimates for fast-slow SPDEs"*
 M. Gnann, **C. Kuehn** and A. Pein
 European Journal of Applied Mathematics, Vol. 30, No. 5, pp. 1004-1024, 2019
- J50 *"Scaling laws and warning signs for bifurcations of SPDEs"*
C. Kuehn and F. Romano
 European Journal of Applied Mathematics, Vol. 30, No. 5, pp. 853-868, 2019
- J49 *"Network topology near criticality in adaptive epidemics"*
 L. Horstmeyer, **C. Kuehn** and S. Thurner
 Physical Review E, Phys. Rev. E, Vol. 98, 042313, 2018

- J48 *"A note on kernel methods for multiscale systems with critical transitions"*
 B. Hamzi, **C. Kuehn** and S. Mohammed
 Mathematical Methods in the Applied Sciences, Vol. 42, No. 3, pp. 907-917, 2019
- J47 *"Validity of amplitude equations for nonlocal nonlinearities"*
C. Kuehn and S. Throm
 Journal of Mathematical Physics, Vol. 59, 071510, 2018
- J46 *"Analysis and predictability for tipping points with leading-order nonlinear terms"*
 F. Romano and **C. Kuehn**
 International Journal of Bifurcation and Chaos, Vol. 28, No. 8, 1850103, 2018
- J45 *"Early warning signs for bifurcations with bounded noise"*
C. Kuehn, G. Malavolta and M. Rasmussen
 Journal of Mathematical Analysis and Applications, Vol. 464, pp. 58–77 , 2018
- J44 *"Tracking particles in flows near invariant manifolds via balance functions"*
C. Kuehn, F. Romano and H.C. Kuhlmann
 Nonlinear Dynamics, Vol. 92, No. 3, pp. 983–1000, 2018
- J43 *"Stochastic mixed-mode oscillations in a three-species predator-prey model"*
 S. Sadhu and **C. Kuehn**
 Chaos: An Interdisciplinary Journal of Nonlinear Science, Vol. 28, No. 3, 033606, 2018
- J42 *"Quenched noise and nonlinear oscillations in bistable multiscale systems"*
C. Kuehn
 EPL (Europhysics Letters), Vol. 120, 10001, 2017
- J41 *"Generalized play hysteresis operators as limits of fast-slow systems"*
C. Kuehn and C. Münch
 SIAM Journal on Applied Dynamical Systems, Vol. 16, No. 3, pp. 1650-1685, 2017
- J40 *"Model Spaces of Regularity Structures for Space-Fractional SPDEs"*
 N. Berglund and **C. Kuehn**
 Journal of Statistical Physics, Vol. 168, No. 2, pp. 331-368, 2017
- J39 *"Uncertainty transformation via Hopf bifurcation in fast-slow systems"*
C. Kuehn
 Proceedings of the Royal Society A, Vol. 473, 20160346, 2017
- J38 *"Continuation of probability density functions using a generalized Lyapunov approach"*
 S. Baars, J.P. Viebahn, T.E. Mulder, **C. Kuehn**, F.W. Wubs and H.A. Dijkstra
 Journal of Computational Physics, Vol. 336, No. 1, pp. 627643, 2017
- J37 *"A meeting point of entropy and bifurcations in cross-diffusion herding"*
 A. Jüngel, **C. Kuehn** and L. Trussardi
 European Journal of Applied Mathematics, Vol. 28, No. 2, pp. 317-356, 2017
- J36 *"A dynamical systems' approach for the contact-line singularity in thin-film flows"*
 F.B. Belgacem, M. Gnann and **C. Kuehn**
 Nonlinear Analysis A: Theory, Methods & Applications, Vol. 144, pp.204-235, 2016

- J35 *"A numerical framework to understand transitions in high-dimensional stochastic dynamical systems"*
 H.A. Dijkstra, A. Tantet, J. Viebahn, E. Mulder, M. Hebbink, D. Castellane,
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