

Name: **Christian Kuehn**
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Faculty of Mathematics
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EMPLOYMENT

2016 – now Technical University of Munich, Germany
Assistant Professor for “Multiscale and Stochastic Dynamics” (W2, tenure-track)
Lichtenberg Professorship (2016- now)

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 (ASSISTANT PROFESSOR LEVEL)

- 2018 - 2019: TUM Foundation Fellowship
PI (postdoc) Hildeberto Jardon-Kojakhmetov
(co-PI / host C. Kuehn)
- 2017 - 2020: D-A-CH Individual Project Grant
German Science Foundation (DFG) & Austrian Science Fond (FWF)
(PI, co-PI N. Zamponi)
- 2017 - 2021: Collaborative Research Center SFB/TR 109
German Science Foundation (DFG)
(PI for project B10, co-PI Y. Suris)
- 2017: Richard-von-Mises Prize
Gesellschaft für Angewandte Mathematik und Mechanik
(International Association of Applied Mathematics and Mechanics)
- 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: Individual Project Grant
Austrian Science Fond (FWF)
(co-PI, transferred to S. Thurner)
- 2016 - 2021: Lichtenberg Professorship Grant
Volkswagen Foundation
(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: APART Fellowship - Austrian Academy of Sciences (ÖAW)
Austrian Programme for Advanced Research and Technology
(PI, success rate: 9.6%)
- 2013: Leibniz Fellowship
Mathematisches Forschungsinstitut Oberwolfach (MFO)
(PI, 10 weeks fully financed research stay at MFO)
- 2011 - 2015: European Commission Marie-Curie Re-integration Grant
hosted by: P. Szmolyan, Vienna University of Technology
(PI, evaluation result: grade A)
- 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 (\$ 1000 prize)
- 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

- 2018: Workgroup TUM/TU-Wien Organizer
Fractional Laplacian: Numerics, Analysis, Dynamics (4 talks)
at Technical University of Munich (Garching, Germany)
- 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: TopMath Independent Studies Examiner
- 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 Difference Equations
 - AIP Advances
 - American Naturalist
 - Applied Mathematical Modelling
 - Applied Mathematics and Computation
 - Applied Mathematics Letters
 - Bioinformatics and Biology Insights
 - 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
 - Discrete and Continuous Dynamical Systems Series B
 - Earth System Dynamics
 - European Biophysics Journal
 - European Physical Journal B
 - 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 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 the Royal Society Interface
- Kinetic & Related Models
- Mathematical Biosciences
- Mathematical Biosciences and Engineering
- Mathematical Methods in the Applied Sciences
- Mathematical Modelling and Analysis
- Mathematical Modelling of Natural Phenomena
- Mathematics and Computers in Simulation
- Mathematics and Mechanics of Solids
- Mathematische Nachrichten
- New Journal of Physics
- Nonlinear Analysis A: Theory, Methods & Applications
- Nonlinear Differential Equations and Applications NoDEA
- Nonlinear Dynamics
- Nonlinearity
- PLoS One
- 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
- 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):
 - Banff International Research Station, Canada
 - Deutsche Forschungsgemeinschaft (DFG), Germany
 - Dynasty Foundation, Russia
 - German Academic Exchange Service (DAAD), Germany
 - National Science Centre, Poland
 - TUM SFB/TR 109 Internal Proposals, Germany

MENTORING

- Postdoctoral Researcher: Maxime Breden
- Postdoctoral Researcher: Maximilian Engel
- Postdoctoral Researcher: Manuel Gnann
- Postdoctoral Researcher: Leonhard Horstmeyer (jointly with S. Thurner)
- Postdoctoral Researcher: Alexandra Neamtu
- Postdoctoral Researcher: Nada Sissouno (jointly with F. Kraemer)
- Postdoctoral Researcher: Sebastian Throm
- Doctoral Student: Annalisa Iuorio (jointly with P. Szmolyan)
- Doctoral Student: Anne Pein
- Doctoral Student: Lara Trussardi (jointly with A. Jüngel)
- Doctoral Student: Andreas Widder (jointly with V. Veliov)
- Master Student: Luca Arcidiacono
- Master Student: Michael Klausz (jointly with K. Glau)
- Master Student: Tobias Jawecki
- Master Student: Francesco Romano
- Master Student: Elisabeth Schiessler (jointly with A. Jüngel)
- Master Student: Frieder Simon (jointly with P. Szmolyan)
- Master Student: Dominik Worf
- Bachelor Student: Luca Arcidiacono
- Bachelor Student: Tobias Böhle

TEACHING & WORK EXPERIENCE

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|-------------|---|
| 2017 – 2018 | Lecturer: “Introduction to Nonlinear Dynamics” - TU Munich |
| 2017 – 2018 | Hauptseminar: “Topics in Dynamical Systems” - TU Munich |
| 2017 – 2018 | Oberseminar: “Dynamics” - TU Munich |
| 2017 | Lecturer: “Dynamical Systems” - TU Munich |
| 2017 | Oberseminar: “Dynamics” - TU Munich |
| 2017 | (Pro-)Seminar: “Introduction to Network Dynamics” - TU Munich |
| 2017 – now | Module Responsibility - TU Munich
ODEs MA2005; Nonlinear Dynamics MA3082; Dynamical Systems MA3081. |
| 2017 | Mathematische Grundlagen - Technical University Munich
oral exams for combination of Analysis I/II & Linear Algebra I/II |
| 2016 – 2017 | Lecturer: “Interactions between Dynamics and PDE” - TU Munich |
| 2016 | Invited Lecturer: School on Multistability and Tipping (Dresden, Germany) |

- 2016 Lecturer: “Dynamical Systems and Partial Differential Equations” - TU Munich
- 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 Lecturer: “Dynamical Systems and Partial Differential Equations” - TU Vienna
- 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
- 2004 Internship - ONVIDA GmbH (Duisburg, Germany)
- 2003 Internship - EADS Space Transportation (Bremen, Germany)

PLENARY TALKS

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

INVITED TALKS (* = UPCOMING)

- 2018 * Control of Self-Organizing Nonlinear Systems (Warnemünde, Germany)
- 2018 * Conference on Mathematics of Wave Phenomena (Karlsruhe, Germany)
- 2018 * SFB 1114: Scaling Cascades in Complex Systems (Berlin, Germany)
- 2018 * Prediction of Transitions in Complex Systems (Dresden, Germany)
- 2018 * GAMM Annual Meeting [2 talks] (Munich, Germany)
- 2018 * Extremes2018 Conference (Hannover, Germany)
- 2018 * Seminar Applied Analysis (Heidelberg, 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

- 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

- 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

- 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

- Deutsche Mathematiker-Vereinigung (DMV)
 - Member: Fachgruppe Stochastik
- 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)
- 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*: L^AT_EX, 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, draft (250 pp.) available upon request
 under contract with SIAM
- B1 *"Multiple Time Scale Dynamics"*
C. Kuehn, 814 pages, Springer, 2015
 in the series: Applied Mathematical Sciences

JOURNAL PUBLICATIONS (REFEREED):

[(*) denotes a publication with alphabetical author listing]

- J41 *"Quenched noise and nonlinear oscillations in bistable multiscale systems"*
C. Kuehn
 EPL (Europhysics Letters), accepted / to appear, 2017
- J40 *"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
- J39 *"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
- J38 *"Uncertainty transformation via Hopf bifurcation in fast-slow systems"*
C. Kuehn
 Proceedings of the Royal Society A, Vol. 473, 20160346, 2017
- J37 *"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. 627-643, 2017
- J36 *"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
- J35 *"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
- J34 *"Heterogeneous population dynamics and scaling laws near epidemic outbreaks"*
 A. Widder and **C. Kuehn**
 Mathematical Biosciences & Engineering, Vol. 13, No. 5, pp.1093-1118, 2016
- J33 *"FitzHugh-Nagumo SPDEs in three space dimensions driven by space-time white noise"*
 (*) N. Berglund and **C. Kuehn**
 Electronic Journal of Probability, Vol. 21, No. 18, pp. 1-48, 2016
- J32 *"A remark on geometric desingularization of a non-hyperbolic point using hyperbolic space"*
C. Kuehn
 Journal of Physics: Conference Series, Vol. 727, 012008, 2016

- J31 *"Numerical continuation and SPDE Stability for the 2D cubic-quintic Allen-Cahn equation"*
C. Kuehn
 SIAM/ASA Journal on Uncertainty Quantification, Vol. 3, No. 1, pp. 762-789, 2015
- J30 *"Predictability of Critical Transitions"*
 X. Zhang, S. Hallerberg and **C. Kuehn**
 Physical Review E, Vol. 92, 052905, 2015
- J29 *"Traveling waves for bistable evolution equations with nonlocal-diffusion"*
 (*) F. Achleitner and **C. Kuehn**
 Advances in Differential Equations, Vol. 20, No. 9-10, pp. 887-936, 2015
- J28 *"Efficient gluing of numerical continuation and a multiple solution method for elliptic PDEs"*
C. Kuehn
 Applied Mathematics and Computation, Vol. 266, pp. 656-674, 2015
- J27 *"Multiscale geometry of the Olsen model and non-classical relaxation oscillations"*
 (*) **C. Kuehn** and P. Szmolyan
 Journal of Nonlinear Science, Vol. 25, No. 3, pp. 583-629, 2015
- J26 *"Early warning signs for saddle-escape transitions in complex networks"*
C. Kuehn, G. Zschaler and T. Gross
 Scientific Reports, Vol. 5, 13190, 2015
- J25 *"From random Poincaré maps to stochastic mixed-mode-oscillation patterns"*
 (*) N. Berglund, B. Gentz and **C. Kuehn**
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