CURRICULUM VITAE

JÜRGEN GEISER

November 30, 2020

CURRENT RESEARCH AFFILIATION IN GERMANY

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EMPLOYMENT (GUEST/ASSOCIATE PROFESSOR IN SELF-FINANCED RESEARCH AND LECTURING PROJECTS)

Sept. 2020 –	UNIVERSITY OF LUXEMBOURG, *Visiting Lecturer*, Project: Particle-/Mesh-Solvers for Multiscale and Multiphase Models.
May 2019 – Dec. 2019	UNIVERSITY OF LUXEMBOURG, *Visiting Lecturer*, Project: Modelling of Gas/Plasma-Bubbles: Theory and Application.
Nov. 2019 –	RUHR UNIVERSITY OF BOCHUM, GERMANY, *Senior Researcher and Associate Professor*, Research-Project: Multicomponent Diffusion Models for Plasma-Jets: Analysis and Modelling, DFG-Proposals and Collaboration
April 2018 – Oct. 2018	UNIVERSITY OF WARWICK, *Visiting Lecturer*, Project: Analysis of Solvers and Models for Fluid-Dynamical Problems.
Feb. 2018 –	RUHR-UNIVERSITÄT BOCHUM, *Guest Professor*, Project: Numerical case-studies and project-lectures: Computational Hydrodynamics.
Jan. 2017 – July 2017	IMPERIAL COLLEGE, LONDON, UK, *Short term reader for Applied Mathematics*, Project: Numerical Analysis for hydrodynamic interactions.
April 2016 – May 2016	CENTRALESUPELEC, UNIVERSITE PARIS-SACLAY, FRANCE, *Visiting Professor for Applied Mathematics*, Project: Numerical Analysis for asynchronous Iterative Solvers.
Sep. 2015 – Febr. 2016	CENTRALESUPELEC, UNIVERSITE PARIS-SACLAY, FRANCE, *Short term reader for Numerical Analysis*, Funding of the German Academic Exchange Service (DAAD) Winter-Semester 2015.
November 2015	CENTRALESUPELEC, UNIVERSITE PARIS-SACLAY, FRANCE, *Visiting Professor for Applied Mathematics*, Project: Numerical Analysis for Coupled Parareal and Waveform-Relaxation Methods.
April 2015 – May 2015	CENTRALESUPELEC, UNIVERSITE PARIS-SACLAY, FRANCE, *Visiting Professor for Applied Mathematics*, Project: Numerical Analysis for parallel Solvers of Algebraic-Differential Equations.
Sep. 2013 –	RUHR UNIVERSITY OF BOCHUM, GERMANY, *Researcher and Lecturer (Associate Professor)*, Research-Project: Multicomponent-Transportmodels for Atmospheric Plasmas: Modelling and Simulation, Block-Lectures: Modelling and Simulation of Transport- and Flow-Problems in Engineering Applications.
Feb. 2004 – May 2004	TEXAS A & M UNIVERSITY, Texas, USA *Visiting professor* (Group Professor Richard Ewing), Project: Discretization and solver methods for Multiphysics Problems, Project leaders: Prof. Richard Ewing, Prof. Raytcho Lazarov, Funding Institution: Institute for Scientific Computing (Prof. Ewing).

EMPLOYMENT (POSTDOC- AND PHD-TIME AS STAFF MEMBER AT UNIVERSITIES)

Sep. 2011 – Sep.2014	UNIVERSITY OF GREIFSWALD, GERMANY, *PostDoc-Position in Computational Physics*, Project: Development and Validation of a Software-package for Ion Thrusters in Space Applications, Project leader: Prof. Ralf Schneider, Project vice-leader: Dr. Jürgen Geiser, Funding Institution: DLR (Germany).
Sep. 2007 – Sep. 2010	HUMBOLDT-UNIVERSITÄT ZU BERLIN, GERMANY, *PostDoc-Position in Numerical Analysis*, Project: Nano-coated metal for bipolar plates of PEFC: Modeling and simulation of multi-scale equations, Project leader: Prof. Andreas Griewank, Project vice-leader: Dr. Jürgen Geiser, Funding Institution: BMBF (Germany).
Aug. 2004 – Dec. 2005	WIAS, WEIERSTRASS INSTITUTE FOR APPLIED ANALYSIS AND STOCHASTICS, BERLIN , GERMANY, *PostDoc Position in Applied Mathematics*, Project: Optimal control of sublimation growth of SiC bulk single crystals, Project leader: Prof. Jürgen Sprekels, Dr. Olaf Klein Funding Institution: DFG research center Matheon.
Apr. 1999 – Dec. 2003	UNIVERSITY OF HEIDELBERG, GERMANY, *PhD-position*, Project: Numerical Simulation of Contaminant Transport in a Waste Disposal, Project leader: Prof. Gabriel Wittum, Funding Institution: Interdisciplinary Center for Scientific Computing.

EDUCATION

Mar. 2011 – Juni 2013	HABILITATION IN COMPUTATIONAL ENGINEERING , *Ruhr-Universität Bochum Germany* , Habilitation and Venia Legendi: Computational Engineering, Habilitation Title: Modelling and Simulation of Transport-problems with Mathematical Splitting Techniques , Mentor: Professor Brinkmann , Institution: TET, Ruhr-Universität Bochum .
Mar. 1999 – Feb 2004	DOCTOR OF NATURAL SCIENCES IN NUMERICAL ANALYSIS *University of Heidelberg, Germany* Dissertation Title: Discretization methods for systems of convective-diffusive-dispersive-reactive equations and applications Supervisor: Professor Wittum Institution: IWR, University of Heidelberg .
Sep. 1993 – Feb. 1999	GRADUATE STUDIES IN MATHEMATICS *University of Stuttgart, Germany* Master's Degree (Diploma in Mathematics).
Mar. 1989 – Feb. 1999	UNDERGRADUATE STUDIES MATHEMATICS AND ENGINEERING (DIPLOM) *FHT-Stuttgart, Germany* Bachelor's Degree (Diploma in Mathematics (FH)) .
Jul. 1975 – Jun. 1988	SCHOOL EDUCATION *Vöhringen, Sulz a.N. and VS-Villingen, Germany* .

RESEARCH INTERESTS

1.) Fluid- and plasma-dynamic models,
2.) Numerical Analysis of systems of PDEs and SDEs
3.) FD-, FEM- and FV-methods for PDEs,
4.) Particle in Cell methods, Monte Carlo methods and hybrid methods,
5.) Splitting-methods for PDEs and SPDEs,
6.) Parallelisation methods.
7.) Multiscale and multiphysical modelling.
8.) Multiphase modelling of material problems (thin films).

Teaching Experience (international)

Luxembourg	*Block-Lectures*, "Particle- and Mesh-Solvers: Theory and application" in SS 2020. *Block-Lectures*, "Modelling of Electrohydrodynamical Problems: Theory and application" in SS 2019.
Warwick	*Block-Lectures*, "Modelling of near-far-field bubbles: Theory and application" in SS 2018.
London	*Block-Lectures*, "Multiscale Models and Multiscale Methods" in SS 2017.
Paris	*Block-Lectures*, "Computational Engineering I: Multiscale Problems in Electrodynamics I" in WS 2016. *Block-Lectures*, "Numerical Analysis of Splitting Methods" in WS 2015.
College Station (USA)	*Lecturer* (Seminar lectures) Seminar Lectures "Scientific Computing" May 2004.

Teaching Experience (national) I

Bochum

Online-Lectures,
"Computational Engineering I: Multiscale Problems in Fluiddynamics"
in WS 2020/2021.
Block-Lectures,
Online-Lectures,
"Computational Engineering II: Modelling and Numerics in Electrodynamics"
in SS 2020.
Block-Lectures,
"Computational Engineering I: Multiscale Problems in Fluiddynamics"
in WS 2019/2020.
Block-Lectures,
"Computational Engineering II: Electrodynamics"
in SS 2019.
Block-Lectures,
"Computational Engineering I: Multiscale Problems in "
in WS 2018/2019.
Block-Lectures,
"Computational Engineering II: Fluiddynamics in Electrical Engineering"
in SS 2018.
"Computational Hydrodynamics I: Fluid Dynamics in Computational Engineering I"
in SS 2018.
Block-Lectures,
"Computational Engineering I: Fluiddynamics in Electrical-Engineering"
in WS 2017/2018.
Block-Lectures,
"Computational Engineering II: Multiscale Problems in Electrodynamics"
in SS 2017.
Block-Lectures,
"Computational Engineering I: Multiscale Problems in Fluiddynamics"
in WS 2016/2017.
Block-Lectures,
"Computational Engineering II: Electrodynamics II"
in SS 2016.
Block-Lectures,
"Computational Engineering I: Fluiddynamics in Electrical-Engineering"
in WS 2015/2016.

Teaching Experience (national) II

Bochum	*Block-Lectures*, "Computational Engineering II: Electrodynamics I" in SS 2015. *Block-Seminar*, "Operator Splitting for Fokker-Planck Equations" in SS 2015. *Block-Lectures*, "Computational Engineering I: Electrodynamics" in WS 2014/2015. *Block-Lectures*, "Multiscale-Modelling for effective Simulations of Hydrodynamic Problems" in SS 2014. *Block-Seminar*, "Computational Engineering" in WS 2013/2014. *Block-Lectures*, "Multiscale-Modelling for effective Simulations of Transport phenomena" in WS 2013/2014.
Berlin	*Research Lectures (Conferences and Seminars)* "Modeling of Plasma-processes: Theory and Application to the MetallBip-Project" in 'WS 2010/2011. *Research Lectures (Conferences and Seminars)* "Splitting Methods: Theory and Application" in 'SS 2010. *Research Seminar* (incl. setting the exercises) Master class " Modelling, Simulation and Numerical Analysis : Theory and Application to the MetallBip-Project" in WS 2009. *Lecturer* (incl. setting the exercises) Diploma class "Modeling and Simulation of Real-Life Problems" in WS 2008/2009. Diploma class "Numerical Analysis of PDE I" in WS 2006/2007. Diploma class "Numerical Analysis of PDE II" in SS 2006. Diploma class "Discretization and Solver-Methods for Parabolic Differential Equations" in WS 2005/2006.
Heidelberg	*Research Lectures (Conferences and Seminars)* "Modeling of Transport- and Reaction Problems" in 'WS 2003/2004.

Training and Education of Master, PhD and Post-Doc Students in different projects I

Christos Kravvaritis (University of Athens, Greece)	PhD Student (WS2005/2006-WS2008/2009), Project: Domain Decomposition Methods of Parabolic Differential Equations.
Joschka Gedicke (Humboldt University of Berlin, Germany)	Master Student (WS2006/2007-SS2007), Project: Decomposition Methods of Parabolic Differential Equations.
Lena Noack (Humboldt University of Berlin, Germany)	Master student (WS2006/2007-WS2007/2008), Project: Iterative Decomposition Methods of Hyperbolic Differential Equations.
Volker Schlosshauer (Humboldt University of Berlin, Germany)	Master Student (WS2006/2007-WS2007/2008), Project: Splitting of Wave equations.
Tillmann Miltzow (Humboldt University of Berlin, Germany)	Master Student (WS2007/2008), Project: PID Controller: Optimization of CVD Apparatus.
Christian Fleck (Humboldt University of Berlin, Germany)	Master Student (SS2008-SS2009), Project: PID Controller: Optimization of CVD Apparatus.
Robert Röhle (Humboldt University of Berlin, Germany)	Master Student (WS2007/2008-WS2009/2010), Project: Chemical Reactions: Kinetic Processes of chemical vapor deposition apparatus.
Thomas Zacher (Humboldt University of Berlin, Germany)	Student and Research Assistant (since SS2008), Project: Iterative Methods, Solver Methods and Simulation-Package in Matlab.
Friedrich Krien (Humboldt University of Berlin, Germany)	Master Student (SS2009-WS2009/2010), Project: Iterative Operator Splitting Methods. Simulation-Package in Matlab.
Sven Blankenburg (Humboldt University of Berlin, Germany)	Master Student (SS2009-WS2010/2011), Project: Microscale Models solved with Monte Carlo Methods.
Meraa Arab (Humboldt University of Berlin, Germany)	PhD student (WS2007/2008-SS2011) Project: Modeling, Simulation and Optimization of Deposition Processes.
Felix Knüttel (Humboldt University of Berlin, Germany)	Master Student (WS2009/2010-SS2011), Project: Coupling Models for Micro- and Macro-Scales.

Training and Education of Master, PhD and Post-Doc Students in different projects II

Julia Duras (University of Greifswald, Germany)	PhD Student (WS2011/2012-SS2014), Project: Adaptive Particle in Cell with Monte Carlo Collision: Analysis and Application.
Karl Felix Lüskow (University of Greifswald, Germany)	Master Student (WS2011/2012-SS2014), Project: Fast ODE Solvers for Hamiltonian Problems.
Jens Oberrath (Ruhr University of Bochum, Germany	PhD Student (SS2013-WS2014), Project: Splitting Methods for Boltzmann Problems.
Jens Hahn (Humboldt University of Berlin, Germany	PhD Student (WS2014-SS2014), Project: Decomposition Methods for Dynamical Systems.
Vahid Yaghoubi (Chalmers University Gothenburg, Sweden)	PhD Student (WS2014-), Project: Splitting method for Fokker-Planck equations.
Beatrice Gaviraghi (University of Würzburg, Germany)	PhD Student (SS2015), Project: Splitting method for Fokker-Planck equations.
Karsten Bartecki (Ruhr University of Bochum, Germany)	Master Student (SS2015-SS2020), Project: Iterative and Exponential Splitting Methods for Maxwell Equations.
Guillaume Gbikpi-Benissan (CentraleSupelec Paris, France)	PhD Student (WS2015-SS2016), Project: Asynchronous Parareal Methods for Algebraic-Differential Equations.
Carolin Ratering (Ruhr University Bochum, Germany)	Master Student (WS2016-WS2017), Project: Simulation of Two-phase flows in a Cylinder.
Marc Müller (Ruhr University Bochum, Germany)	Master Student (WS2017), Project: Multiscale methods for Stochastic-Differential Equations.
Amirbahador Nasari (Ruhr University Bochum, Germany)	Master Student (WS2017-WS2019), Project: Multiscale methods for Schroedinger Equations.
Dennis Ogiermann (Ruhr University Bochum, Germany)	Master Student (WS2017-SS2019), Project: Stochastic Modelling for Dynamics of Depression.

Training and Education of Master, PhD and Post-Doc Students in different projects III

Dennis Ogiermann (Ruhr University Bochum, Germany)	PhD Student (WS2019-), Project: Numerical Methods for Hodgkin-Huxley Type Systems.
Mohammad Hajiketabi (Imam Khomeini International, Iran)	Post-Doc Student (SS2020-), Project: Schwarz-Waveform-Relaxation Methods for Parabolic and Hyperbolic PDEs
Abdullah Mujahid (Ruhr University Bochum, Germany)	Master Student (SS2020-), Project: Multiscale- and Multiphase Solvers for Dynamical Systems.

UNIVERSITY INVITATIONS I

May 2011	*Invited Speaker to Research-Colloquium*, Ruhr University of Bochum, Theoretical Electrical Engineering, 18th May 2011, Lecture: Modelling and Simulation of Transport- and Flow-Problems with mathematical Decomposition methods.
Dec. 2011	*Invitation to the Workshop of Prof. Helander(MPI Greifswald)*, Max-Planck Institute for Plasma-Physics, Greifswald Lecture: Numerical Methods for Multiscale Problems.
March 2012	*Status Meeting (Prof. Schneider)* , Institute of Physics, University of Greifswald. Lecture: Adaptive PIC: Theory and Application.
Sept. 2012	*Conference NummDiff-13 (Prof. Podhaisky)* Martin-Luther-University of Halle-Wittenberg. Lecture: Multi-product operator splitting of solving differential equations: Theory and Application.
Oct. 2012	*Invitation to the Workshop of Prof. Sonnendruecker (MPI Garching)* Max-Planck Institute for Plasma Physics, Garching. Lecture: Adaptive and Multiscale PIC for Electromagnetic Problems.
June 2013	*Organizer of a Mini-symposium (Conference of Prof. Bathe, MIT, USA)* MIT, Cambridge, MA, USA. Lecture: Recent advances in splitting methods for Multiscale Problems.
Sept. 2013	*Invited speaker to the Mini-symposium of Prof. Lai, University of Greenwich, UK.* London Mathematical Society Mini-symposium, Kingston University, London, UK, Lecture: Recent Advances in Iterative Splitting Methods, 2-4 September, 2013.

UNIVERSITY INVITATIONS II

Sept. 2014	*Minisymposium (Invited Organizer of Prof. Barry, Heriot-Watt, UK)* ECT2014, Naples, Italy, own Minisymposium: Multiscale Methods Lecture: Review Lecture in Multiscale Methods, 2-5 September, 2014.
Nov. 2014	*Workshop (Prof. Schmiegel, Aarhus University, Denmark)* Workshop on Particle Transport; with Emphasis on Stochastics Lecture: Splitting Methods for Particle Transport: Theory and Application in Plasma Simulations, 6-7 November 2014.
Dec. 2014	*5th International Conference on Scientific Computing and Partial Differential Equations* SCPDE2014, Hong Kong, China, Invited Speaker to the Minisymposium: Operator Splitting for PDEs Lecture: Iterative Operator Splitting Schemes, 8-12 December, 2014.
Feb. 2015	*Minisymposium (Conference of Prof. Troch, TU Vienna, Austria* Mathmod2015, Vienna, Austria, own minisymposium, Lectures: 1.) Multiscale Modelling and Method of Multiple Scales, 2.) Mobile and Immobile Models based on Multiscales, 18-20 February, 2015.
Sept. 2017	*Minisymposium-Title: Splitting methods: Theory and applications* SciCADE, the International Conference on Scientific Computation and Differential Equations, Minisymposium-Title: Splitting methods: Theory and applications, University of Bath, UK, September 11-15, 2017 (Minisymposium organizer) SciCADE2017.
June 2018	*Minisymposium-Title: Splitting methods for Multicomponent and Multiscale Problems: Theory and Applications* FDM:T&A' 2018, the 7th Conference on Finite Difference Methods: Theory and Applications, Lozenetz, Bulgaria, June 11-16, 2018 (Minisymposium organizer and invited speaker).
April 2019	*Mathematical Colloquium*, Prof. Ehrhardt, Chair of Applied Mathematics/Numerical Analysis, University of Wuppertal, Wuppertal, Germany, Lecture: Splitting Approaches for Fokker-Planck Equations: Theory and Applications, 9th April, Wuppertal, Germany, 2019.
Dec. 2019	*Seminar Lecture*, Prof. Klingenberg, Department of Mathematics, University of Würzburg, Würzburg, Germany, Lecture: On diffusion for models of gas mixtures, 17th December, 2019.

Visiting Appointments (Invitation with fundings) I

2004	Dr. Richard Ewing Scholarship, ISC, Texas A & M University, February-May 2004.
2007	Scholarship from the Kalkhofen-Rose-Stiftung, Academy of Literature and Science, Mainz, Germany, Annual Program for 1.1.2007-31.12.2007.
2009	DFG-Tubitak (German-Turkish Funds) Visiting Program for 15.6.-15.7.2009 (visit of Prof. Gamze Tanoglu, Izmir, Turkey).
2013	DAAD-Scholarship (Conference funding), 12.6.2013-14.6.2013, Visit of the Conference: MIT conference of Prof. K.J. Bathe, Cambridge, MA, USA.
2013	Award of Prof. Choi-Hong Lai, University Greenwich, UK, 2.9.2013-4.9.2013, Invited Speaker: DCABES, Minisymposium of Prof. Ch.-H. Lai, University Greenwich, UK.
2014	Conference-Stipend of Prof. Barry Topping, Heriot-Watt University, Edinburgh, UK, 2.9.2014-5.9.2014, Invited Editorial Board and Minisymposium-Organizer: ECT2014, Naples, Italy, own Minisymposium: Multiscale Methods.
2014	Workshop-Invitation of Prof. Schmiegel, Aarhus University, Denmark, 6.11.-7.11.2014, Invited Speaker: Workshop on Particle Transport with Emphasis on Stochastics, University of Aarhus, Denmark.

Visiting Appointments (Invitation with fundings) II

2014	Conference-Stipendium of Prof. Herrmann Brunner, Hong-Kong Baptist University, China, 8-12 December, 2014, Invited Speaker of 5th SCPDE in the minisymposium of Prof. Brunner, HKBU, HK.
2015	Visiting Professor at CentraleSupelec, Paris, France, Invitation of Prof. Magoules, ECP, France, Visiting Professor April/May 2015.
2015	Visiting Professor at CentraleSupelec, Paris, France, Invitation of Prof. Magoules, ECP, France, Visiting Professor November 2015.
2016	Visiting Professor at CentraleSupelec, Paris, France, Invitation of Prof. Magoules, ECP, France, Visiting Professor May 2016.
2016	Short-term Reader at Centrale Supelec, Paris, France, Funding: DAAD (Bonn). Wintersemester 2015/2016.
2016	Visiting Professor at Ecole Central Paris, France, Invitation of Prof. Magoules, ECP, France, Visiting Professor May 2016.
2017	Short-term Reader at Imperial College, London, UK, Funding: DAAD (Bonn). Summersemester 2017.
2018	Short-term Reader at Warwick University, Warwick, UK, Funding: DAAD (Bonn). Summersemester 2018.
2019	Short-term Reader at Luxembourg University, Luxembourg, L, Funding: DAAD (Bonn). Summersemester 2019.
2020	Short-term Reader at Luxembourg University, Luxembourg, L, Funding: DAAD (Bonn). Summer-/Wintersemester 2020.

Industrial Projects

2011 - 2014	Prof. Ralf Schneider, University of Greifswald, Germany, Project: Development of a software-package for ion-thruster propulsion, BMWI-Project: 1.9.2011 - 31.7.2014, Industrial Funds with research position.
2007 - 2011	Prof. Angelika Heinzel and Prof. Volker Buck, University of Duisburg, Germany, Project: Nano-coated metal for bipolar plates of PEFC, BMWI-Project: 1.9.2007 - 31.7.2011, Industrial Funds with two research positions.
2010 - 2011	Dr. Frank Liebau, GWR GmbH, Teltow, Germany, Project: Splitting Methods and Parallelization for Heat-transfer and Radiation Problems, Program for 1.5.2010-28.2.2011, Industrial Funds with Student projects.
1999 - 2004	Prof. Gabriel Wittum, University of Heidelberg, Germany, Project: Development of a software-package for wastes in deep geological formations, BMWI-Project: 1.3.1999 - 31.1.2004, Industrial Funds with research position.

Offers

2018	List-position and Appointment: Professorship (W2) for Statistics and Analysis, Applied University of Zwickau, June 2018.
2016	List-position and Appointment: Professorship (W2) for Engineering Mathematics, Applied University of Merseburg, November 2016.
2010	Place 2: Junior Professorship in Quantitative Climate, Weather and Energy Analysis, Humboldt University of Berlin, November 2010.

Teaching Awards

2013 - 2017	Evaluated lectures with the Project: Computational Engineering I + II with Moodle-concept Ruhr-University of Bochum, Germany.
2016	elearning award (5 x 5000 Euro) with the Project: Computational Engineering I + II with an Inverted Classroom-concept Ruhr-University of Bochum, Germany, September 2016.

Book Promotion (Awards)

2018	MathWorks Book Program Promotion of my Book: Computational Engineering I, Springer-Vieweg, 2018.

KEYNOTE OR INVITED TALKS

[1] J. Geiser, Simulation in crystal growth for SiC single crystal : Numerical Methods and Applications, Seminar for Scientific Computing, Center for Applied Scientific Computing, UC Lawrence Livermore National Laboratory, Livermore, USA, November 2004.

[2] J. Geiser, Discretization-Optimisation Methods for Nonlinear Parabolic Optimal Control Problems : Theory and Applications, Workshop for Analysis and Optimisation, Department of Applied Mathematics and Physics, National Technical University of Athens, Greece, September 2005.

[3] J. Geiser, Recent Advances in Iterative Splitting Methods, Minisymposium on Advanced Decomposition Methods for Partial Differential Equations, Prof. Lai, University of Greenwich, London, UK, 2-4 September, 2013.

[4] J. Geiser, Multi-Scale Methods for Transport Problems: Theory and Application, Invited Review-Lecture, ECT2014, 9th International Conference on ECT, Naples, Italy, 2-5 September 2014.

[5] J. Geiser, Splitting Methods for Particle Transport: Theory and Application in Plasma Simulations, Invited Workshop-Lecture, Workshop: *Particle transport with emphasis on Stochastics*, Department of Engineering, Aarhus University, Denmark, 6-7 November 2014.

[6] J. Geiser, Recent advances in Splitting Methods for Multiphysics and Multiscale: Theory and Applications, Invited Minisymposium-Lecture, Minisymposium: *Operator Splitting Methods for PDEs*, SCPDE2014, Hong-Kong Baptist University, Hong-Kong, 8-12 December 2014.

[7] J. Geiser, Recent advances in Iterative Splitting Methods for Multicomponent and Multiscale: Theory and Application, Invited Speaker, Research Seminar, Centrale Supelec, MICS laboratory, France, 12 November, 2015.

SEMINARS OR CONFERENCES I

[1] J. Geiser, Modelling, Mathematical Background and Simulation of a waste-disposal for radioactive contaminants in a salt-dome, Seminar, Graduate-College for Nonlinear Analysis and Geometry, Mathematical Department, University of Augsburg, Germany, July 2004 .

[2] J. Geiser, Discretisation Methods for Parabolic-Equations based on Finite-Volume- and related methods and Applications in Fluid- and Gas-Mechanics, Seminar, Graduate-College for Nonlinear Differential-equations, Mathematical Department, University of Freiburg, Germany , October 2004.

[3] J. Geiser, Discretisation- and Optimisation methods for a Parabolic-Equation and application on simulation in crystal growth, Seminar for Numerical Analysis and Optimisation, Mathematical Department, Technical University of Athen, Greek, December 2004.

[4] J. Geiser, Operator-Splitting methods and Discretisation of Parabolic-equations : Numerical Methods and Applications, Seminar for applied Analysis, Department of applied Analysis, Eotvos Lorand University, Faculty of Natural Sciences, Budapest, Hungary, May 2005.

[5] J. Geiser, Operator-Splitting-Methods and Discretization-Methods for Nonlinear Parabolic Equations, Seminar for Modelling and Computation, Department of Engineering, Queen Mary University of London, Great Britain, September 2005.

[6] J. Geiser, Iterative Operator-Splitting Methods and Wave-Relaxation-Methods as effective Black-Box-Methods: Theory and Applications, Research-Seminar: Research Group Thermodynamic Modeling and Analysis of Phase Transitions, Weierstrass Institute for Applied Analysis and Stochastics, Berlin, Germany, December 2005.

[7] J. Geiser, Iterative Operator-Splitting- and Waveform-Relaxation-Methods as effective Black-Box Solvers for Multi-Physical- and Multi-Scaling Problems, ACDL-Seminar, Aerospace Computational Design Laboratory, Massachusetts Institute of Technology, Cambridge, USA, December 2005.

[8] J. Geiser, Iterative Operator-Splitting- and Domain-Decomposition Methods for Multi-Physical- and Multi-Scaling Problems, Introduction-Lecture at Humboldt Universitaet zu Berlin, Department of Mathematics, Germany, February 2006.

[9] J. Geiser, Decomposition Methods for Parabolic Problems and Applications, Lecture at 77th Annual Meeting of the Gesellschaft fuer Angewandte Mathematik und Mechanik e.V. Technische Universitaet Berlin, Germany, March 27-31, 2006.

[10] J. Geiser, Time- and space-decomposition methods as fast adaptive solvers: Theory and Applications in fluid dynamics, Research-Seminar: Modeling, Numerics and Scientific Computing University of Erlangen-Nuernberg, Germany, April 27, 2006.

[11] J. Geiser, Time-Decomposition Methods for Parabolic Problems : Convergence results of Iterative Splitting methods, 17 th International Conference on Domain Decomposition Methods St. Wolfgang/Strobl, Austria, Lecture at Minisymposium of Martin Gander, July 3-7, 2006.

[12] J. Geiser, Time- and Space-Decomposition Methods for Parabolic Problems and Applications in Multiphysics Problems, 17 th International Conference on Domain Decomposition Methods St. Wolfgang/Strobl, Austria, Lecture at Minisymposium of Ronald Hoppe and Ralf Kornhuber, July 3-7, 2006.

[13] J. Geiser, Iterative Operator Splitting Methods As Effective Decomposition Methods For Multiphysics Problems: Theory And Application, SIAM Annual Meeting, July 10-14, 2006, Bostoon Park Plaza Hotel, Boston Massachusetts, Lecture at Minisymposium (MS 94) of Qin Sheng and Abdul Khaliq, 2006.

[14] J. Geiser, Formal Solutions of partial differential equations based on modified additive and iterative operator splitting methods, Lecture at DMV-GDM Conference, March 2007, Humboldt Universitaet zu Berlin, Germany, March 2007.

[15] J. Geiser, Nonlinear Iterative Operator Splitting Methods, Lecture at 6th International Congress on Industrial and Applied Mathematics, 16- 20 July, 2007, Zurich, Switzerland, July 2007.

[16] J. Geiser, Seismic Sources and Waves using Iterative Operator Splitting Methods, Lecture at 6th International Congress on Industrial and Applied Mathematics, 16- 20 July, 2007, Zurich, Switzerland, July 2007.

[17] J. Geiser, Modelling, Discretization and Optimization of CVD-Processes, Research Seminar Optimization, Prof. A.Griewank, Prof. Kummer, Humboldt University of Berlin, Germany, 25 January, 2008.

[18] J. Geiser, Decomposition Methods, Workshop, Prof. R.Nagel, University of Tübingen, Germany, (Encounters between Discrete and Continuous Mathematics), Blaubeuren, April 8-12, 2008.

[19] J. Geiser, Decomposition Methods: Theory and Applications, Seminar, Prof. St. Vandewalle, University of Leuven, Leuven, Belgium, (Numerical Analysis and Scientific Computing), 4 th June 2008.

[20] J. Geiser, Iterative splitting methods as time decomposition methods, Workshop, Prof. Ostermann, Univeristy of Innsbruck, Innsbruck, Austria, (Splitting Methods of Evolution Equations), 15-18th October 2009.

[21] J. Geiser, Iterative splitting methods: Solver for differential equations, Seminar, Prof. Roemisch, Humboldt Universität zu Berlin, Numerik stochastischer Modelle, 6th May 2009.

[22] J. Geiser, Splitting methods: Theory and Application, Minisymposium at Numdiff 12, Conference in Halle, Germany, September 2009.

[23] J. Geiser, Magnus Expansion via Successive Approximation, Minisymposium at AIMS 2010, Conference in Dresden, Germany, May 2010.

[24] J. Geiser, Iterative splitting methods: Extensions, Seminar, Prof. Roemisch, Humboldt Universität zu Berlin, Numerik stochastischer Modelle, 7th June 2010.

[25] J. Geiser, Multiproduct Expansion Methods as Novel Splitting Schemes, Workshop, Prof. Casas, Mathematical Institute, University Castellon, Spain, (Splitting methods for differential equations), September 2010.

[26] J. Geiser, Current Research (Convection Diffusion Equations) and Teaching Course (Black Scholes Models), Seminar, Prof. Schwalbach, School of Business and Economics, Humboldt University of Berlin, Invitation for a Juniorprofessorship, 6th October 2010.

[27] J. Geiser, Operator Splitting and Parareal as Efficient Accelerator and Solver Tools, Seminar, Dr. Fruehsorger, Research Institut, AUDI, Ingoldstadt, Invitation for a Novel Project with Dr. Liebau, November 2010.

[28] J. Geiser, Decomposition methods for Differential Euations: Theory and Applications in Multiphysics, Seminar, Prof. Schimansky-Geier, Department of Physics, Humboldt University of Berlin, Invitation for a Project, January 26th 2011.

[29] J. Geiser, Modelling and Simulation of CVD and PVD Processes: Theory and Applications, Seminar, Prof. Andreas Waag, Department of Material Sciences, Technical University of Braunschweig, Germany, Invitation for a Project, February 10th 2011.

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Dipl.Math. (Uni)	An examination of the oscillation at the sound-board on a cembalo : Reduction into 2 space-dimensions. Diploma Thesis, University of Stuttgart, Germany, 1998.
Dr.rer.nat.	Discretisation methods for systems of convective-diffusive-dispersive-reactive equations and applications. PhD Thesis, Universität Heidelberg, Germany, 2004.
Dr.habil.	Modelling and Simulation of Transportproblems with Mathematical Splitting Techniques. Cumulative Habilitation Thesis, Ruhr University of Bochum, Germany, 2012.
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