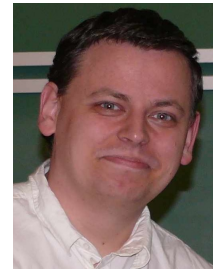


Curriculum vitae



Personal Data

Last name, first name: Kieburg, Mario

Address at Bielefeld University (address of correspondence):

Address: Fakultät für Physik
Universität Bielefeld
Postfach 100131
City: D-33501 Bielefeld (Germany)
Phone (University): +49-(0)521-106-6194
Fax (University): +49-(0)521-106-5244
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E-Mail (University): mkieburg@physik.uni-bielefeld.de
Date of birth: 23.06.1981
Place of birth: D-15806 Zossen (Germany)
Gender: male
Nationality: German
Marital state: married

Academic career

- July 2001 **Abitur** (final High School examination) with **overall grade “sehr gut”**
- October 2001 -
January 2007 Undergraduate studies in Physics at the Technical University of Berlin (Germany)
- January 2007 **Diplom in physics** with **overall grade “sehr gut”**
- Diploma thesis:** *Anwendung des Schwingerschen Variationsprinzips in der (linearisierten) Allgemeinen Relativitätstheorie*
(Application of Schwinger’s Variational Principle in (linearised) General Relativity)
Supervisor: Prof. Dr. H.-H. von Borzeszkowski (supervisor)
- August 2007 -
April 2010 Ph.D. student at the University of Duisburg-Essen (Germany) in the group of Prof. Dr. Thomas Guhr
in the Collaborative Research Center Transregio 12:
Symmetries and Universality in Mesoscopic Systems
4. May 2010 defense of the degree **“Dr. rer. nat.”** with **overall grade “summa cum laude”**
- Ph.D. thesis:** *Supersymmetry in Random Matrix Theory*
Supervisor: Prof. Dr. Thomas Guhr (supervisor)

- May 2010 - February 2011 Post-Doc at the University of Duisburg-Essen in the group of Prof. Dr. Thomas Guhr
- March 2011- February 2013 Feodor-Lynen fellow of the Alexander von Humboldt-Foundation at Stony Brook University (NY, USA) in collaboration with: Prof. Dr. Jacobus J.M. Verbaarschot
- March 2013- March 2015 Post-Doc at Bielefeld University (Germany) in the group of Prof. Dr. Gernot Akemann
- April 2015- June 2016 Post-Doc and Privatdozent (honorary lecturer) at Bielefeld University in the CRC 701: *Spectral Structures and Topological Methods in Mathematics*
8. July 2015 “**Habilitation**” in Theoretical Physics at Bielefeld University
- Habilitation thesis:**
Chiral Random Matrix Theory: Generalizations and Applications
 Referees:
 Prof. Dr. Gernot Akemann
 Prof. Dr. Poul H. Damgaard (first external,
 Niels Bohr Institute in Copenhagen, Denmark)
 Prof. Dr. Yan V. Fyodorov (second external,
 Queen Mary University in London, Great Britain)
- October 2015- March 2016 Research assistant at the University Duisburg-Essen in the group of Prof. Dr. Thomas Guhr
- July 2016- April 2019 Privatdozent in the group of Prof. Dr. Gernot Akemann
- November 2016- April 2019 Associated member of the International Research Training Group 2235:
Searching for the regular in the irregular: Analysis of singular and random systems
- November 2017- April 2019 Associated member of the Collaborative Research Center 1283:
Taming uncertainty and profiting from randomness and low regularity in analysis, stochastics and their applications
- Since April 2019 Lecturer B Position (Assistant Professorship) at the University of Melbourne in the School of Mathematics and Statistics

Grants and awards

1. I successfully applied for a highly competitive grant (*Feodor-Lynen Fellowship*) from the *Alexander von Humboldt Foundation* which was initially granted for two years (03.2011-02.2013) and was carried out at the *State University of New York* at Stony Brook (USA). After two years I successfully applied for an extension by one year (01.2014-12.2014) which was then carried out at Bielefeld University. The grant covered my salary and travel funding. All in all the funding was about **125,000 EUR**. (Copy of certificate is attached.)
2. Moreover I successfully applied for funding of four workshops and a research program which are listed below where I am a co-organizer. The funding was about **180,000 USD** (Simons Center for Geometry & Physics) + **25,500 EUR** (German Research Council (DFG)) + **6,000 EUR** (ECT* Trento) + **10,000 EUR** (Center for Interdisciplinary Research (ZiF)).
3. My Ph.D. thesis was awarded for the best thesis in the Physics Department by the University of Duisburg-Essen at the Dies Academicus 2011. (15.06.2011, copy of certificate is attached)
4. Postdoctoral Achievement Award (since 2014 Pierre-van-Baal-Award) awarded by the State University of New York at Stony Brook (USA). (01.05.2012, copy of certificate is attached)
5. Visitor at the University of Melbourne (Australia) for two weeks (21.10.2012-04.11.2012) and another four weeks (02.10.-28.10.2017, copies are attached).

Organization of conferences and workshops

1. Six month program on random matrix theory at the *Simons Center for Geometry and Physics* (Stony Brook, NY, USA) in Fall 2015 (August 24 - December 18, 2015); co-organizers: A. Borodin, P.J. Forrester, Y. Fyodorov, A. Guionnet, J.P. Keating, and J.J.M. Verbaarschot
2. Workshop “Random Matrix Theory, Integrable Systems, and Topology in Physics” at the *Simons Center for Geometry and Physics* (Stony Brook, NY, USA) from November 2nd to November 6th 2015; co-organizers: Y. Fyodorov and J.J.M. Verbaarschot
3. Workshop “Random Product Matrices: New Developments and Applications” at the *Centre of Interdisciplinary Research* (Bielefeld, Germany) from August 22nd to 26th 2016; co-organizers: P.J. Forrester and R. Speicher
4. Workshop “RMT, time-series and many-body systems” from June 26th to 30th 2017 and scientific gathering “Correlations in time series and many-body systems” from June 18th to July 8th 2017 at the Centro Internacional de Ciencias A.C. (Cuernavaca, Mexico); co-organizers: T. Gorin, T. H. Seligman, J. J. M. Verbaarschot, and M. Vyas
5. Workshop “Sums and Products of Random Matrices” at the *Centre of Interdisciplinary Research* (Bielefeld, Germany) from August 27th to 31st 2018; co-organizers: Gernot Akemann, Guiseppa Alfano, and Friedrich Götze
6. Workshop “RMT in High Energy Physics and Beyond (A Conference in Honor of Jac Verbaarschot’s 65th Birthday)” at *ECT** (Trento, Italy) from August 5th to 9th 2019; co-organizers: Kim Splittorff and Tilo Wettig

Experience in administration

- | | |
|-----------------------|--|
| Fall 2011 - Fall 2012 | - member of the Provost's Graduate Student Lecture Series committee at the State University of New York (Stony Brook); we awarded excellent Ph.D. students for their research by granting them a public presentation of their work |
| Summer 2015 - present | - organization of an interdisciplinary seminar on random matrix theory for national and international guests (jointly with the groups of Prof. Götze (mathematics) and Prof. Akemann (physics)) |
| Fall 2016 - present | - mentoring of PhD students in the International Research Training Group (IRTG) 2235 |

Professional service to the community

1. member of the advisory board of Journal of Physics A: Mathematical and Theoretical
2. referee of Advances in Applied Clifford Algebras
3. referee of Annales Henri Poincaré
4. referee of Communications in Mathematical Physics
5. referee of Electronic Communications in Probability
6. referee of IEEE Journal on Selected Areas in Communications
7. referee of Journal of High Energy Physics
8. referee of Journal of Mathematical Physics (**selected as an outstanding referee for the year 2013/14**)
9. referee of Journal of Multivariate Analysis
10. referee of Journal of Physics A: Mathematical and Theoretical
11. referee of Journal of Statistical Mechanics: Theory and Experiment
12. referee of Nuclear Physics B
13. referee of Physical Review E
14. reviewer of MathSciNet - American Mathematical Society
15. reviewer of research projects applied at the French Research Council (ANR)

Teaching experience

Lectures:

Winter 15/16	- 1 module (MSc & PhD level) "Differential Geometry in Field Theory"
Summer 15,16,17	- 3 modules (MSc level) "Mathematical Physics"
Winter 16/17	- 1 module including lecture notes (MSc & PhD level) "Introduction in Random Matrix Theory"

Tutorial courses:

(incl. preparation of exercises and marking)

Winter 07/08	- Theoretical Physics III: Quantum Mechanics (BSc level)
Summer 08	- General Relativity (MSc level)
Summer 09	- Theoretical Physics IV: Statistical Physics (BSc level)
Winter 13/14	- Symmetries in Physics (Group Theory) (MSc level)

Cover lessons to lectures:

Summer 08	- General Relativity (MSc level)
Winter 13/14	- Symmetries in Physics (Group Theory) (MSc level)
Summer 14	- Mathematical Techniques in Physics (BSc level)
Winter 14/15	- Elementary Particle Physics (BSc level)
Winter 15/16	- Mathematical Techniques in Physics (BSc level)

Some of these courses were given in English and some in German. The course Mathematical Techniques in Physics is a first year course with typically 100 students.

Supervision of students

I did my Habilitation and was appointed as a Privatdozent (honorary lecturer) in 2015 in Bielefeld. I currently supervise and have successfully supervised the following students:

- Johannes Demir (Bachelor student, successfully finished in October 2017)
- Yanik-Pascal Förster (Bachelor student, successfully finished in April 2017, one joined preprint as a result of his BSc thesis); he is also my current Master student since March 2018
- Valentin Gorski (current Bachelor student, since March 2018)
- Tim R. Würfel (Master student, successfully finished in September 2017, two joined papers as a result of his MSc thesis)
- Nichlas Gesing (Bachelor student, successfully finished in May 2016)

Moreover I have successfully co-supervised and still co-supervise the following students:

Ph.D. students:

- Tomasz Checinski (current Ph.D. student of G. Akemann, one joined paper as a result of his PhD thesis)
- Ivan Ferrada (current Ph.D. student of G. Akemann)

- Jesper R. Ipsen (former Ph.D. student of G. Akemann, two joined papers as a result of his PhD thesis)
- Adam Mielke (current Ph.D. student of G. Akemann)
- Tim Wirtz (former Ph.D. student of T. Guhr, five joined papers as a result of his PhD thesis)
- Tim R. Würfel (current Ph.D. student of G. Akemann)
- Savvas Zafeiropoulos (former Ph.D. student of J. J. M. Verbaarschot, ten joined papers as a result of his PhD thesis)

Diploma and Master students:

- Vural Kaymak (former Master student of T. Guhr, one joined paper as a result of his MSc thesis)
- Christian Recher (former Diploma student of T. Guhr, two joined papers as a result of his Diploma thesis)
- Rene F. Wegner (former Master student of G. Akemann, one joined paper as a result of his MSc thesis)

Bachelor students:

- Tim R. Würfel (former Bachelor student of G. Akemann)

For further details on the co-supervision please contact G. Akemann (akemann@physik.uni-bielefeld.de), T. Guhr (thomas.guhr@uni-due.de), and J. J. M. Verbaarschot (jacobus.verbaarschot@stonybrook.edu).

Short listed for lectureships

- Lecturer in Mathematical Physics at the University of Melbourne (Australia); chair of the committee: Prof. Dr. A. Owczarek; June 2015
- Lecturer in Mathematics at University of Warwick (Great Britain); chair of the committee: Prof. Dr. C. Sparrow; January 2016

The copy of the certificates/ letters of invitation are attached.