

CURRICULUM VITÆ

RAFAŁ ROMAN SUSZEK, *Ph.D.*

 PERSONAL DATA

RAFAŁ ROMAN SUSZEK

Katedra Metod Matematycznych Fizyki
 Wydział Fizyki
 Uniwersytet Warszawski
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Gender: Male

Date of birth: October 21st, 1977

Birthplace: Puławy, woj. lubelskie

Citizenship: Polish

Marital status: Married

Languages: Polish, English (fluent);

French, German (very good);

Russian (passive);

Hebrew (rudimentary)

Other interests: Polish culture and history; Jewish culture and history in Poland;
 literature (modern prose, historiography); Eurasian cinematography;
 classical and ethnic music, jazz (listening), djembe (playing);
 oenology; Polish, Jewish, Indian and African cuisine, tinctures (preparation);
 skiing, mountaineering, equestrianism, sabre fencing, biking;

 RESEARCH INTERESTS

differential-cohomological structures on manifolds and loop spaces (fibre bundles, bundle gerbes, n -gerbes etc.); non-commutative geometry and the associated gauge field theory; Lie-, loop-, Poisson–Lie- and quantum-group theory, generalised (complex) geometry; category theory; topological quantum field theory; geometric and deformation quantisation; (generalised) Ricci flow; conformal field theory; geometry of non-linear sigma models; mathematical aspects of string theory; field theories with defects; matrix models; models of gravity with torsion; integrable systems

EDUCATION

Post-graduate

6/10/2005 **Ph.D. in theoretical physics** at the Physics Faculty of the University of Warsaw

Thesis: *Quantum Wess–Zumino–Novikov–Witten Branes*

Scientific advisor: Dr. hab. Jacek Pawełczyk, Prof. UW

Referees: Prof. Dr. hab. Jerzy Lukierski (University of Wrocław)

Prof. Dr. hab. Krzysztof Meissner (University of Warsaw)

7/2004–8/2005 **Marie-Curie Fellowship** at the Department of Mathematics, King's College London, UK

Project: *Spectral Non-commutative Geometry of the Boundary CFT*

Scientific advisor: Dr. Andreas Recknagel

10/2001–10/2005 **Ph.D. studies** at the Institute of Theoretical Physics at the Physics Faculty of the University of Warsaw

Project: *Quantum Wess–Zumino–Novikov–Witten Branes*

Scientific advisor: Dr. hab. Jacek Pawełczyk, Prof. UW

Undergraduate

5/7/2001 **M.Sci. in theoretical physics** at the Physics Faculty of the University of Warsaw (*summa cum laude*)

Thesis: *The structures of non-commutative geometry in string theory*

Scientific advisor: Dr. hab. Jacek Pawełczyk, Prof. UW

Referee: Prof. Dr. hab. Krzysztof Meissner (University of Warsaw)

6/2001 graduation at the Physics Faculty of the University of Warsaw

1999–2001 M.Sci. studies at the Physics Faculty of the University of Warsaw

Project: *The structures of non-commutative geometry in string theory*

Scientific advisor: Dr. hab. Jacek Pawełczyk, Prof. UW

1999–2001 Interdisciplinary Individual Studies in Mathematical and Natural Sciences, University of Warsaw

Scientific advisor: Dr. hab. Jacek Pawełczyk, Prof. UW

Pre-university

5/1996 **baccalaureate**, II Liceum in Puławy, woj. lubelskie

- 1992–1996 II Liceum in Puławy, woj. lubelskie; mathematic-physical profile (12/1994 Cambridge Certificate of Proficiency in English)
- 1984–1992 Primary School No. 9 in Puławy, woj. lubelskie

FELLOWSHIPS AND GRANTS

- 10/2009–9/2010 Post-doctoral fellow in Sonderforschungsbereich “Teilchen, Strings und frühes Universum: Struktur von Materie und Raum-Zeit”, Section A4 “Mathematical Foundations of String Theory”, Bereich Algebra und Zahlentheorie, Department Mathematik, Universität Hamburg, Germany (project coordinator: Prof. Dr. hab. Christoph Schweigert)
- 9/2008–11/2008 Junior Research Fellow at The Erwin Schrödinger International Institute for Mathematical Physics, Wien, Austria
- 11/2007–11/2009 EPSRC First Grant EP/E005047/1, Department of Mathematics, King’s College London, UK (grant coordinator: Prof. Dr. hab. Ingo Runkel)
- 10/2006–9/2007 ANR Post-doctoral Fellow at Laboratoire de Physique, École Normale Supérieure de Lyon, France (scientific advisor: Prof. Dr. hab. Krzysztof Gawędzki)
- 11/2005–9/2006 EUCLID Post-Doctoral Fellow at Laboratoire de Physique, École Normale Supérieure de Lyon, France (scientific advisor: Prof. Dr. hab. Krzysztof Gawędzki)
- 7/2004–8/2005 Marie Curie Fellow at the Department of Mathematics, King’s College London, UK (scientific advisor: Dr. Andreas Recknagel)
- 2003–2005 Research grant of the Committee of Scientific Research No. 2 P03B 001 25 (grant coordinator: Dr. hab. Jacek Pawełczyk, Prof. UW)
- 2001–2005 Doctoral fellow at the Physics Faculty of the University of Warsaw

AFFILIATIONS AND HITHERTO EMPLOYMENT

- 9/2010– Katedra Metod Matematycznych Fizyki, Wydział Fizyki, Uniwersytet Warszawski, Poland (Assistant Professor)
- 10/2009–9/2010 Bereich Algebra und Zahlentheorie, Department Mathematik, Universität Hamburg, Germany (wissenschaftlicher Mitarbeiter)
- 9/2008–11/2008 The Erwin Schrödinger International Institute for Mathematical Physics, Wien, Austria (Junior Research Fellow)
- 11/2007–10/2009 Department of Mathematics, King’s College London, UK (Research Associate)
- 10/2006–9/2007 Laboratoire de Physique, École Normale Supérieure de Lyon, France (Post-doc ANR)
- 11/2005–9/2006 Laboratoire de Physique, École Normale Supérieure de Lyon, France (EUCLID Post-doctoral Fellow)
- 8/2005 Department of Mathematics, King’s College London, UK (Marie Curie Fellow)

- 7/2004–1/2005 Department of Mathematics, King's College London, UK (Marie Curie Fellow)
- 10/2001–9/2005 Katedra Teorii Cząstek i Oddziaływań Elementarnych, Instytut Fizyki Teoretycznej, Wydział Fizyki, Uniwersytet Warszawski (Ph.D. fellow)

SHORT SCIENTIFIC VISITS

- 13-20/5/2013 Institut de Mathématiques de Bourgogne, Dijon, France (invitation from Dr. Karol K. Kozłowski)
- 14-22/9/2012 Department für Physik, Ludwig-Maximilians-Universität München, Germany (invitation from Dr. Nils Carqueville)
- 11-17/12/2011 Laboratoire de Physique, École Normale Supérieure de Lyon, France (scientific collaboration with Prof. Dr. hab. Krzysztof Gawędzki & Dr. Konrad Waldorf)
- 25/10-2/11/2009 Laboratoire de Physique, École Normale Supérieure de Lyon, France (scientific collaboration with Prof. Dr. hab. Krzysztof Gawędzki & Dr. Konrad Waldorf)
- 23-30/4/2009 Albert-Einstein-Institut, Golm, Germany (invitation from Dr. Stefan Fredenhagen)
- 23-25/3/2009 Laboratoire de Physique, École Normale Supérieure de Lyon, France (scientific collaboration with Prof. Dr. hab. Krzysztof Gawędzki)
- 27/11-4/12/2008 Laboratoire de Physique, École Normale Supérieure de Lyon, France (scientific collaboration with Prof. Dr. hab. Krzysztof Gawędzki)
- 10-22/3/2008 Laboratoire de Physique, École Normale Supérieure de Lyon, France (scientific collaboration with Prof. Dr. hab. Krzysztof Gawędzki & Dr. Konrad Waldorf)

COLLOQUIA AND SEMINARS ORGANISED

- 21/3-5/4/2013 a series of monographic lectures on "Asymptotics of β ensembles" by Dr. Karol K. Kozłowski (CNRS, Université de Bourgogne, Institut de Mathématiques de Bourgogne, Dijon) given at Katedra Metod Matematycznych Fizyki and Instytut Fizyki Teoretycznej Wydziału Fizyki Uniwersytetu Warszawskiego
- 10/2012- The Thursday Colloquium "The Algebra & Geometry of Modern Physics" (a colloquium on mathematical physics, organised jointly with Dr. K. Palka of IM PAS and Dr. P. Sułkowski of ITP UW since 2013; course ID: 1100-4sTAGOMP)

LECTURES AND TALKS

- 21/11/2013 *Categorical quantisation: From topological invariants to RCFT*, Seminar "Theory of Duality", Katedra Metod Matematycznych Fizyki, Wydział Fizyki, Uniwersytet Warszawski, Poland
- 7,14,28/11/2013 *Quantum (field) theory as a functor – Part I, II, III*, The Thursday Colloquium "The Algebra & Geometry of Modern Physics", Katedra Metod Matematycznych Fizyki, Wydział Fizyki, Uniwersytet Warszawski oraz Instytut Matematyczny PAN, Warszawa, Poland
- 15/5/2013 *The geometry and cohomology of the two-dimensional CFT*, Séminaire général, Institut de Mathématiques de Bourgogne, Dijon, France

- 13/2/2013 *Defects, gerbes and the gauge anomaly*, invited talk at the Workshop on Field Theories with Defects, Center for Mathematical Physics, Universität Hamburg, Germany
- 18-20/9/2012 *Sigma models up for grabs*, lectures on (gauged) multi-phase sigma models, gerbes and generalised geometry at the Arnold Sommerfeld Center for Theoretical Physics of Ludwig-Maximilians-Universität München, Germany
- 23/8/2012 *Gauge defect networks in 2d CFT*, invited talk at the XXIX International Colloquium on Group-Theoretical Methods in Physics, The Chern Institute of Mathematics, Nankai University, Tianjin, China
- 30/6/2012 *The Gauge Principle in Two-Dimensional Conformal Field Theory*, The XXXI Workshop on Geometric Methods in Physics, Zakład Fizyki Matematycznej, Wydział Matematyki i Informatyki, Uniwersytet w Białymstoku, Poland
- 11,13/01/2012 *The Gauge Principle in 2d sigma-models/critical string theory I, II*, Seminar "Exact Results in Quantum Theory and Relativity", Katedra Metod Matematycznych Fizyki, Wydział Fizyki, Uniwersytet Warszawski, Poland
- 31/10/2011 *Bi-brane Fusion*, invited talk at the Workshop on Representation Theoretical and Categorical Structures in Quantum Geometry and Conformal Field Theory, Department Mathematik, Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen, Germany
- 15/4/2011 *Spin Chains from the Frog's Perspective*, Conference "stringtheory.pl/2011", Instytut Fizyki Teoretycznej, Wydział Fizyki, Uniwersytet Warszawski, Poland
- 24/11/2010 *Strings, Gerbes, and All That. 2. Symmetries and Generalised Geometry*, Seminar "Methods of Geometry in Physics", Instytut Matematyki PAN, Warszawa, Poland
- 18,25/11/2010 *Strings, Gerbes, and All That. 1. Generalities*, Seminar "Theory of Duality", Katedra Metod Matematycznych Fizyki, Wydział Fizyki, Uniwersytet Warszawski, Poland
- 24/9/2010 *A new air on the old \mathcal{G} -string*, invited talk at The International Conference "Geometry and Physics", Instytut Matematyki, Uniwersytet Jagielloński, Kraków, Poland
- 29/3/2010 *On Gerbes, Generalised Geometry and σ -Models*, Mathematical Physics Seminar, Instytut Matematyki, Uniwersytet Jagielloński, Kraków, Poland
- 24/3/2010 *Gauging Sigma Models in the Presence of Conformal Defects*, SFB Meeting, Hamburg, Germany
- 23/2/2010 *Defects, Dualities and Gauging in String Theory via Gerbes*, Nordic String Theory Meeting 2010, Hannover, Germany
- 6/12/2009 *Gerbes, Symmetries and Generalised Geometry*, invited talk at The 5th Meeting of the Seminar "Transformation Groups and Mathematical Physics", Hamburg, Germany
- 14/10/2009 *Gerbes, Defects and Fusion Rules*, The 5th Baltic-Nordic Workshop "Algebra, Geometry, and Mathematical Physics", Będlewo, Poland
- 27/4/2009 *Gerbes, World-Sheet Defects and σ -Model Symmetries*, Albert-Einstein-Institut, Golm, Germany

- 24/4/2009 *Why Gerbes Matter?*, introductory lectures on bundle gerbes at the Albert-Einstein-Institut, Golm, Germany
- 8/1/2009 *On Bundle Gerbes and Non-linear Sigma Models*, Seminar "Theory of Duality", Katedra Metod Matematycznych Fizyki, Wydział Fizyki, Uniwersytet Warszawski, Poland
- 21/12/2008 *Gerbes Matter*, Conference "Quantum Gravity in Cracow²", Instytut Fizyki Teoretycznej, Uniwersytet Jagielloński, Kraków, Poland
- 28/11/2008 *Gerbes for World-Sheets Quiver*, Séminaire "Géométrie et Physique mathématique" de l'Équipe Algèbre, Géométrie, Logique, Institut Camille Jordan, Université Claude Bernard Lyon 1, France
- 14/11/2008 *World-Sheet Defects, Symmetries and Gerbes*, DESY Workshop on "Applied 2d Sigma Models", Deutsches Elektron Synchrotron, Hamburg, Germany
- 22/9/2008 *World-Sheet Structures for Defect Junctions in 2d σ -Models*, invited talk at the ESI Workshop on "Operator Algebras and Conformal Field Theories", The Erwin Schrödinger International Institute for Mathematical Physics, Wien, Austria
- 4/2008 *Per Gerba ad Astra – Gerbes Made Simple I,II,III*, introductory lectures on bundle gerbes at the Department of Mathematics, King's College London, UK
- 27/8/2007 *From Higher to Twisted Gauge Fields via Deformed σ -Models*, ESI Workshop on "Poisson Sigma Models, Lie Algebroids, Deformations, and Higher Analogues", The Erwin Schrödinger International Institute for Mathematical Physics, Wien, Austria
- 27/4/2007 *Landscape with a Background Gerbe*, Seminar "Exact Results in Quantum Theory and Relativity", Katedra Metod Matematycznych Fizyki, Wydział Fizyki, Uniwersytet Warszawski, Poland
- 5/4/2007 *The Reshetikhin–Turaev Construction – an Example of TQFT*, Arbeitsgemeinschaft mit aktuellem Thema: "Algebraic Structures in Conformal Field Theories", Mathematisches Forschungsinstitut Oberwolfach, Germany
- 22/11/2006 *Air on the \mathcal{G} -String*, Séminaire "Géométrie et Physique mathématique" de l'Équipe Algèbre, Géométrie, Logique, Institut Camille Jordan, Université Claude Bernard Lyon 1, France
- 13/9/2006 *The Geometry of WZW Branes – from gerbes to quantum groups and back*, International Workshop of the EUCLID Network "Integrable Models and Applications: from Strings to Condensed Matter", Laboratoire de Physique, École Normale Supérieure de Lyon, France
- 6/4/2006 *Cold Fusion for WZW Branes*, the Gong Show at the Spring School of the EUCLID Network "Integrable Models and Applications: from Strings to Condensed Matter", Institut für Theoretische Physik, Freie Universität Berlin, Germany
- 27/5/2005 *Quantum Wess–Zumino–Novikov–Witten Branes*, The Friday Seminar, Instytut Fizyki Teoretycznej, Uniwersytet Wrocławski, Poland
- 26/1/2005 *Twisted Reflections on Twisted $SU(2n+1)$ Branes*, Theoretical Physics Group Seminar, Department of Mathematics, King's College London, UK

- 28/7/2004 *WZW Patterns in Reflection Algebras*, Theoretical Physics Group Seminar, Department of Mathematics, King's College London, UK
- 7/11/2001 *Non-commutative Geometry Strikes Back*, Seminar on HEP and Cosmology, Instytut Fizyki Teoretycznej, Uniwersytet Warszawski, Poland
- 22/10/2001 *Non-commutative Geometries – a New Outlook on Gauge Theories*, Seminar of the Theory of Elementary Interactions, Instytut Fizyki Teoretycznej, Uniwersytet Warszawski, Poland
- 6/12/2000 *Target Space Non-commutativity in String Theory*, Seminar on HEP and Cosmology, Instytut Fizyki Teoretycznej, Uniwersytet Warszawski, Poland

PUBLICATIONS, PREPRINTS AND THESES

Years 2009–2013

- XV R.R.S., “*Gauge Defect Networks in Two-Dimensional CFT*”, in: “Symmetries and Groups in Contemporary Physics, Proceedings of The XXIXth International Colloquium on Group-Theoretical Methods in Physics, Chern Institute of Mathematics, August 20-26, 2012”, Nankai Series in Pure, Applied Mathematics and Theoretical Physics, 2013, World Scientific (pp. 411–416).
- XIV R.R.S., “*Defects, dualities and the geometry of strings via gerbes, II. Generalised geometries with a twist, the gauge anomaly and the gauge-symmetry defect*”, arXiv preprint 1209.2334 [hep-th] (95 pages). (3 citations)
- XIII K. GAWĘDZKI, R.R.S., AND K. WALDORF, “*The gauging of two-dimensional bosonic sigma models on world-sheets with defects*”, Rev. Math. Phys. **25** (2013) 1350010 (122 pages). (3 citations)
- XII R.R.S., “*The Gerbe Theory of the Bosonic Sigma-Model: The Multi-phase CFT, Dualities, and the Gauge Principle*”, Acta Phys. Pol. B Proc. Suppl. **4** (2011) 425–460.
- XI R.R.S., “*Defects, dualities and the geometry of strings via gerbes, I. Dualities and state fusion through defects*”, arXiv preprint 1101.1126 [hep-th] (61 pages). (7 citations)
- X K. GAWĘDZKI, R.R.S., AND K. WALDORF, “*Global gauge anomalies in the two-dimensional bosonic sigma model*”, Commun. Math. Phys. **302** (2011) 513–580. (8 citations)
- IX I. RUNKEL AND R.R.S., “*Affine $su(2)$ fusion rules from gerbe 2-isomorphisms*”, J. Diff. Geom. **61** (2011) 1527–1552. (4 citations)
- VIII I. RUNKEL AND R.R.S., “*Gerbe-holonomy for surfaces with defect networks*”, Adv. Theor. Math. Phys. **13.4** (2009) 1137–1219. (25 citations)
- VII K. GAWĘDZKI, R.R.S., AND K. WALDORF, “*Bundle gerbes for orientifold sigma models*”, Adv. Theor. Math. Phys. **15.3** (2011) 621–688. (12 citations)

Before 2009

- VI R.R.S., “*The Reshetikhin–Turaev Construction – an Example of TQFT*”, in: Arbeitsgemeinschaft mit aktuellem Thema: “Algebraic Structures in Conformal Field Theories”, Oberwolfach Reports vol. 4, 2007, EMS Publishing House (pp. 971–975).

- V K. GAWĘDZKI, R.R.S., AND K. WALDORF, “WZW orientifolds and finite group cohomology”, *Commun. Math. Phys.* **284** (2008) 1–49. (12 citations)
- IV A. RECKNAGEL AND R.R.S., “Non-commutative Weitzenböck geometry, gerbe modules, and WZW branes”, *JHEP* **0802** (2008) 089. (3 citations)
- III J. PAWELCZYK AND R.R.S., “Brane bulk couplings and condensation from REA fusion”, *JHEP* **0604** (2006) 009. (2 citations)
- II J. PAWELCZYK, H. STEINACKER, AND R.R.S., “Twisted WZW branes from twisted REA’s”, *Nucl. Phys. (PM)* **B724** (2005) 487–502. (1 citation)
- I J. PAWELCZYK AND R.R.S., “Quantum matrix models for simple current orbifolds”, *Nucl. Phys. (PM)* **B710** (2005) 599–613. (2 citations)
- PhD R.R.S., “Quantum Wess–Zumino–Novikov–Witten Branes”, Ph.D. Thesis defended at the Faculty of Physics, University of Warsaw (October 6th, 2005; in English).
- MSc R.R.S., “Struktury Geometrii Nieprzemiennej w Teorii Strun”, M.Sci. Thesis defended at the Faculty of Physics, University of Warsaw (July 5th, 2001; in Polish).

Papers in writing and preparation

- XVIII K. GAWĘDZKI AND R.R.S., “T-duality: Gerbes, defects, and all that”, in preparation.
- XVII R.R.S., “Quasi-Hamiltonian (bi-)G-spaces, loop-group actions, and bi-brane fusion”, in preparation.
- XVI I. RUNKEL AND R.R.S., “Maximally symmetric defects with junctions in the classical WZW model”, in writing (to appear soon).

CONFERENCES, WORKSHOPS AND SCHOOLS (PARTICIPATION)

- 13-15/2/2013 The Workshop on Field Theories with Defects, Center for Mathematical Physics, Universität Hamburg, Germany
- 20-26/8/2012 The XXIX International Colloquium on Group-Theoretical Methods in Physics, The Chern Institute of Mathematics, Nankai University, Tianjin, China
- 24-30/6/2012 The XXXI Workshop on Geometric Methods in Physics, Zakład Fizyki Matematycznej, Wydział Matematyki i Informatyki, Uniwersytet w Białymstoku, Poland
- 31/10-2/11/2011 Workshop on Representation Theoretical and Categorical Structures in Quantum Geometry and Conformal Field Theory, Department Mathematik, Friedrich-Alexander-Universität Erlangen–Nürnberg, Erlangen, Germany
- 15-17/4/2011 Conference “stringtheory.pl/2011”, Instytut Fizyki Teoretycznej, Wydział Fizyki, Uniwersytet Warszawski, Poland
- 21-25/9/2010 International Conference “Geometry and Physics”, Instytut Matematyki, Uniwersytet Jagielloński, Kraków, Poland
- 24/3/2010 SFB Meeting, Universität Hamburg, Germany

- 22-23/2/2010 Nordic String Theory Meeting 2010, Leibniz Universität Hannover, Germany
- 5-6/12/2009 The 5th Meeting of the Seminar “Transformation Groups and Mathematical Physics”, Universität Hamburg, Germany
- 22-26/6/2009 “*Strings 2009*”, Università degli studi di Roma “Tor Vergata”, Italy
- 3-4/4/2008 *The 13th Annual UK meeting on Integrable Models, Conformal Field Theory and Related Topics*, Oxford University, UK
- 19-21/12/2008 “*Quantum Gravity in Cracow²*”, Instytut Fizyki Teoretycznej, Uniwersytet Jagielloński, Poland
- 10-14/11/2008 *DESY Workshop on “Applied 2d Sigma Models*”, Deutsches Elektron Synchrotron, Hamburg, Germany
- 25/8-14/12/2008 *ESI Workshop on “Operator Algebras and Conformal Field Theories*”, The Erwin Schrödinger International Institute for Mathematical Physics, Wien, Austria
- 11-15/8/2008 *Prestrings '08 in Zürich*, Eidgenössische Technische Hochschule, Zürich, Switzerland
- 11-12/4/2008 *The 13th Annual UK meeting on Integrable Models, Conformal Field Theory and Related Topics*, International Centre for Mathematical Sciences, Edinburgh, UK
- 14-15/12/2007 “*Fields, Lattices and Condensed Matter*”, A symposium in honour of John Cardy’s 60th birthday, Oxford University, UK
- 1/8-21/9/2007 *ESI Workshop on “Poisson Sigma Models, Lie Algebroids, Deformations, and Higher Analogues*”, The Erwin Schrödinger International Institute for Mathematical Physics, Wien, Austria
- 28-30/6/2007 “*Fields, Fluids and Branes*”, *Conference on Mathematical Physics on the Occasion of the 60th Birthday of Krzysztof Gawędzki*, Laboratoire de Physique, École Normale Supérieure de Lyon, France
- 1-7/4/2007 *Arbeitsgemeinschaft mit aktuellem Thema: “Algebraic Structures in Conformal Field Theories*”, Mathematisches Forschungsinstitut Oberwolfach, Germany
- 11-15/9/2006 *International Workshop of the EUCLID Network “Integrable Models and Applications: from Strings to Condensed Matter*”, Laboratoire de Physique, École Normale Supérieure de Lyon, France (coorganiser)
- 6-11/4/2006 *Spring School of the EUCLID Network “Integrable Models and Applications: from Strings to Condensed Matter*”, Institut für Theoretische Physik, Freie Universität Berlin, Germany (coorganiser)
- 7-18/6/2004 *ESI Workshop on “String theory on non-compact and time-dependent backgrounds*”, The Erwin Schrödinger International Institute for Mathematical Physics, Wien, Austria
- 15-23/3/2004 *Spring School on Superstrings and Related Matters*, The Abdus Salam International Centre of Theoretical Physics, Trieste, Italy
- 2-12/6/2003 *School on Mathematics in String and Field Theory*, The Abdus Salam International Centre of Theoretical Physics, Trieste, Italy

- 31/3-8/4/2003 *Spring School on Superstrings and Related Matters*, The Abdus Salam International Centre of Theoretical Physics, Trieste, Italy
- 25-29/5/2002 *V European Meeting "From the Planck Scale to the Electroweak Scale: SUPER-SYMMETRY AND BRANE WORLDS"*, Kazimierz Dolny nad Wisłą, Poland
- 18-26/3/2002 *Spring School on Superstrings and Related Matters*, The Abdus Salam International Centre of Theoretical Physics, Trieste, Italy
- 3-14/9/2001 *VII National Summer School for Graduate Students, WE-Heraeus-Doktorandenschule Saalburg "Grundlagen und neue Methoden der theoretischen Physik"*, Saalburg, Germany
- 5-16/2/2001 *XXXVII Winter School of Theoretical Physics*, Karpacz, Poland

OTHER SCIENTIFIC ACTIVITIES

- 4-5/2013 membre externe du comité de recrutement, Institut de Mathématiques de Bourgogne, Dijon, France
- 2012/2013 coorganiser of the Thursday Colloquium „Modern Mathematical Methods in Physics” (together with Dr. Wojciech Kamiński)

TEACHING

- 2013/2014 seminar The Thursday Colloquium "The Algebra & Geometry of Modern Physics", Faculty of Physics, University of Warsaw; 30+30 hrs (fall and spring semesters)
- 2013/2014 tutorial classes on „Algebra IE” (1100-1Ind02), Faculty of Physics, University of Warsaw; 30 hrs (fall semester)
- 2013/2014 tutorial classes on „Mathematics I” (1100-1AF11), Faculty of Physics, University of Warsaw; 120+90 hrs (fall and spring semesters)
- 2012/2013 lecture course on „Algebra IIE” (1100-1Ind06), Faculty of Physics, University of Warsaw; 30 hrs (spring semester)
- 2012/2013 tutorial classes on „Analysis II” (1100-1AF21), Faculty of Physics, University of Warsaw; 60 hrs (spring semester)
- 2012/2013 lecture course on „Algebra IE” (1100-1Ind02), Faculty of Physics, University of Warsaw; 30 hrs (fall semester)
- 2012/2013 tutorial classes on „Analysis I” (1100-1AF12), Faculty of Physics, University of Warsaw; 60 hrs (fall semester)
- 2011/2012 tutorial classes on „Mathematics II” (1100-1AF22), Faculty of Physics, University of Warsaw; 90 hrs (spring semester)
- 2011/2012 tutorial classes on „Algebra IE” (1100-1Ind01), Faculty of Physics, University of Warsaw; 30 hrs (fall semester)
- 2011/2012 tutorial classes on „Analysis III” (1100-2AF10), Faculty of Physics, University of Warsaw; 60 hrs (fall semester)
- 2010/2011 tutorial classes on „Algebra IIE” (1100-1Ind06), Faculty of Physics, University of Warsaw; 30 hrs (spring semester)

2010/2011	tutorial classes on „Analysis IV” (1100-3AnIV), Faculty of Physics, University of Warsaw; 30 hrs (spring semester)
2010/2011	tutorial classes on „Analysis III” (1100-2AF10), Faculty of Physics, University of Warsaw; 60 hrs (fall semester)
2010/2011	tutorial classes on „Algebra with geometry” (1100-1AF01), Faculty of Physics, University of Warsaw; 30+30 hrs (fall and spring semesters)
2003/2004	tutorial classes on „Mathematics I” (1102-101A), Faculty of Physics, University of Warsaw; 60 hrs (fall semester)
2001/2002	tutorial classes on „Electrodynamics with elements of field theory”, Faculty of Physics, University of Warsaw; 60 hrs (spring semester)
2001/2002	tutorial classes on „Analysis IIB”, Faculty of Physics, University of Warsaw; 60 hrs (spring semester)
2001/2002	tutorial classes on „Analysis IB”, Faculty of Physics, University of Warsaw; 60 hrs (fall semester)

 TEACHING – SYLLABUS PREPARATION

2012/2013	an innovatory, substantially modernised lecture course on algebra for individual students
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 TEACHING – LECTURE NOTES AND OTHER WRITTEN MATERIALS

2012/2013	notes for the lecture course on „Algebra IE” and „Algebra IIE” (available on-line, ca. 375 pages – in writing (awaiting a student’s contribution))
2010–2013	notes for the tutorial classes on algebra and analysis (available on-line)

 OTHER ACTIVITIES

2010	a multimedia presentation of the Department of Mathematical Methods in Physics at the information day for undergraduate students, Faculty of Physics, University of Warsaw
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