

■ **PERSONAL INFORMATION**

Office address: **Utrecht University**
Mathematical Institute
Budapestlaan 6
NL-3584 CD Utrecht

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■ **ACADEMIC POSITIONS**

2023.09 – ... **Utrecht University**, Universitair Docent

2019.09 – 2023.08 **Cergy Paris Université**, Professeur des Universités
(on leave of absence from 2023.09)

2014.09 – 2019.08 **Université Grenoble Alpes** (Institut Fourier),
Maître de Conférences (tenured assistant/associate professor)

2015.01 – 2015.04 **Stanford University**, Visiting Scholar

2013.10 – 2014.08 **Université Paris-Sud** (Orsay), Post-doctoral Researcher

2013.06 – 2013.09 **Universität Göttingen**, Research Assistant

■ **ACADEMIC DEGREES, QUALIFICATIONS**

2018.12.13 **Université Grenoble Alpes**, Habilitation à diriger des recherches
thesis: “Analyse microlocale et globale en théorie des champs
sur espace-temps courbe”
reviewers: Frédéric Hélein (Paris 7), Stefan Hollands (Leipzig),
András Vasy (Stanford)
committee: Colin Guillarmou (Paris-Sud), Jérémy Faupin (Lorraine, Metz),
Dietrich Häfner (Grenoble), Frédéric Hélein (Paris 7),
Christian Gérard (Paris-Sud), Jérémie Szeftel (Paris 6)

2010.05 – 2013.08 **Universität Göttingen**, PhD in mathematics
thesis: “Singularities of two-point functions in Quantum Field Theory”
supervisor: Dorothea Bahns, 2nd *supervisor*: Ingo Witt

2005.10 – 2010.04 **University of Warsaw**, MSc in physics

thesis: “Potentials leading to an exactly solvable Schrödinger equation”
supervisor: Jan Dereziński

■ FELLOWSHIPS, AWARDS

- 2023–2028 Junior Membership, Institut Universitaire de France (declined)
- 2021–2022 Senior Fellow, Freiburg Institute for Advanced Studies
- 2021–2025 Prime d’Encadrement Doctoral et de Recherche (French Ministry of Higher Education award for excellent research and supervision)
- 2019 Research Member, MSRI Berkeley (01.09.19–14.12.19)
- 2018 Invited Researcher, Institut des Hautes Études Scientifiques, Bures-sur-Yvette (10.09.18–10.10.18)
- 2018 Visiting Fellow, Wolfson College, University of Cambridge (15.06.18–30.08.18)
- 2017–2021 Prime d’Encadrement Doctoral et de Recherche
- 2017 Délégation CNRS (one-semester sabbatical awarded by the CNRS)
- 2015 Fellowship of the France-Stanford Center for Interdisciplinary Studies
- 2013–2014 Sophie Germain Fellowship, Hadamard Foundation (FMJH)
- 2010 Maria Bardadin-Otwinowska Prize

■ GRANTS, NETWORKS

Principal or co-principal investigator:

- 2023–2025 Co-PI in ANR grant “Quantum fields interacting with geometry”, acronym QFG (with D. Häfner)
- 2016–2020 PI in ANR JCJC grant “Scattering and propagation phenomena near spacetime horizons”, acronym Horizons
- 2017–2018 Co-PI in BayFrance project “Local-to-global phenomena in Quantum Field Theory” (with W. Dybalski), funded by the BFHZ/CCUFB (French-Bavarian Center for Academic Cooperation)

Member:

- 2021–2022 Member in ANR grant “Quantum fields interacting with geometry”, acronym QFG (PIs: C. Gérard & D. Häfner)
- 2018 Member in PHC French-Irish Ulysses project “Black hole radiation meets microlocal analysis” (PIs: C. Gérard & K. Sanders)
- 2023–date Member of NWO cluster “Geometry and Quantum Theory” (GQT)
- 2023–date Member of NWO cluster “Nonlinear Dynamics of Natural Systems” (NDNS+)
- 2018–2022 Member of GDR network “Renormalisation : Nouvelles Structures et Applications” (Renorm)

2017–2023 Member of GDR network “Analysis of Partial Differential Equations” (AEDP)
2016–2023 Member of GDR network “Quantum Dynamics” (DynQua)

■ PUBLICATIONS & PREPRINTS

- [1] C. Gérard, M. Wrochna, IR-fixed Euclidean vacuum for linearized gravity on de Sitter space, [arXiv:2405.00866](#) (21 p.), 2024 preprint;
- [2] A. Enciso, G. Uhlmann, M. Wrochna, Reconstruction of a Lorentzian manifold from its Dirichlet-to-Neumann map, [arXiv:2303.08430](#) (21 p.), 2023 preprint;
- [3] C. Gérard, S. Murro, M. Wrochna, Wick rotation of linearized gravity in Gaussian time and Calderón projectors, [arXiv:2204.01094](#) (63 p.), 2023 preprint;
- [4] N. V. Dang, M. Wrochna, Complex powers of the wave operator and the spectral action on Lorentzian scattering spaces, *Journal of the European Mathematical Society* (JEMS), 10.4171/JEMS/1389 (2023), [arXiv:2012.00712](#);
- [5] C. Gérard, D. Häfner, M. Wrochna, The Unruh state for massless fermions on Kerr spacetime and its Hadamard property, accepted in *Annales Scientifiques de l'École Normale Supérieure* 1 (56), 127–196, (2023), [arXiv:2008.10995](#);
- [6] M. Wrochna, R. Zeitoun, The wave resolvent for compactly supported perturbations of static spacetimes, in: M. Ruzhansky et al. (eds), *Harmonic Analysis and Partial Differential Equations, Trends in Mathematics*, Springer (2022) [arXiv:2204.01094](#);
- [7] N. V. Dang, M. Wrochna, Dynamical residues of Lorentzian spectral zeta functions, *Journal de l'École Polytechnique — Mathématiques*, 9, 1245–1292 (2022), [arXiv:2108.07529](#);
- [8] D. Shen, M. Wrochna, An index theorem on asymptotically static spacetimes with compact Cauchy surface, *Pure and Applied Analysis*, 4 (4), 727–766 (2022), [arXiv:2104.02816](#);
- [9] O. Gannot, M. Wrochna, Propagation of singularities on AdS spacetimes for general boundary conditions and the holographic Hadamard condition, *Journal of the Institute of Mathematics of Jussieu* 21 (1), 67–127 (2022), [arXiv:1812.06564](#);
- [10] M. Wrochna, Wick rotation of the time variables for two-point functions on analytic backgrounds, *Letters in Mathematical Physics* 110, 585–609 (2020), [arXiv:1711.04011](#);
- [11] C. Gérard, M. Wrochna, The massive Feynman propagator on asymptotically Minkowski spacetimes II, *International Mathematics Research Notices* 20, 6856–6870 (2020), [arXiv:1806.05076](#);
- [12] W. Dybalski, M. Wrochna, A mechanism for holography for non-interacting fields on anti-de Sitter spacetimes, *Classical and Quantum Gravity* 36 (8), (2019), [arXiv:1809.05123](#);

- [13] M. Wrochna, Conformal extension of the Bunch–Davies state across the de Sitter boundary, *Journal of Mathematical Physics* 60 (2), 022301, (2019), arXiv:1711.04011;
- [14] C. Gérard, M. Wrochna, The massive Feynman propagator on asymptotically Minkowski spacetimes I, *American Journal of Mathematics* 141 (6), 1501–1546, (2019), arXiv:1609.00192;
- [15] A. Vasy, M. Wrochna, Quantum fields from global propagators on asymptotically Minkowski and extended de Sitter spacetimes, *Annales Henri Poincaré*, 19 (5), 1529–1586 (2018), arXiv:1512.08052;
- [16] C. Gérard, M. Wrochna, Analytic Hadamard states, Calderón projectors and Wick rotation near analytic Cauchy surfaces, *Communications in Mathematical Physics*, 366 (1), 29–65 (2019), arXiv:1706.08942;
- [17] M. Wrochna, The holographic Hadamard condition on asymptotically Anti-de Sitter spacetimes, *Letters in Mathematical Physics*, 107 (12), 2291–2331 (2017), arXiv:1612.01203;
- [18] C. Gérard, M. Wrochna, Hadamard property of the *in* and *out* states for Klein-Gordon fields on asymptotically static spacetimes, *Annales Henri Poincaré*, 18 (8), 2715–2756 (2017), arXiv:1609.00190;
- [19] C. Gérard, O. Oulghazi, M. Wrochna, Hadamard states for the Klein-Gordon equation on Lorentzian manifolds of bounded geometry, *Communications in Mathematical Physics*, 352 (2), 519–583 (2017), arXiv:1602.00930;
- [20] M. Wrochna, J. Zahn, Classical phase space and Hadamard states in the BRST formalism for gauge field theories on curved spacetime, *Reviews in Mathematical Physics*, 29 (4), 1750004 (2017), arXiv:1407.8079;
- [21] C. Gérard, M. Wrochna, Construction of Hadamard states by characteristic Cauchy problem, *Analysis & PDE*, 9 (1), (2016), arXiv:1409.6691;
- [22] C. Gérard, M. Wrochna, Hadamard states for the linearized Yang–Mills equation on curved spacetimes, *Communications in Mathematical Physics*, 337 (1), (2015), arXiv:1403.7153;
- [23] D. Bahns, M. Wrochna, On–shell extension of distributions, *Annales Henri Poincaré*, 15 (10), 2045–2067, (2014), arXiv:1210.5448;
- [24] C. Gérard, M. Wrochna, Construction of Hadamard states by pseudo-differential calculus, *Communications in Mathematical Physics*, 325 (2), 713–755 (2013), arXiv:1209.2604;
- [25] J. Dereziński, M. Wrochna, Continuous and holomorphic functions with values in closed operators, *Journal of Mathematical Physics*, 55 (8), 083512, (2013), arXiv:1309.0164;

- [26] M. Wrochna, Quantum Field Theory in static external potentials and Hadamard states, *Annales Henri Poincaré* 13 (8), 1841–1871, (2012), [arXiv:1108.2982](#);
- [27] J. Dereziński, M. Wrochna, Exactly solvable Schrödinger operators, *Annales Henri Poincaré* 12 (2), 397–418, (2011), [arXiv:1009.0541](#);

Proceedings:

- [28] N. V. Dang, M. Wrochna, Lorentzian spectral zeta functions on asymptotically Minkowski spacetimes, to appear in: A. Galstyan et al. (eds), *Analysis, Applications, and Computations - Selected contributions of the 13th ISAAC Congress, Ghent, Belgium, 2021*, [arXiv:2202.06408](#), (2022);
- [29] C. Gérard, M. Wrochna, The Feynman problem for the Klein–Gordon equation, *Séminaire Laurent Schwartz — EDP et applications*, (2019–2020), Exposé no. 4.

■ **SCIENTIFIC ACTIVITIES**

- | | |
|---------|--|
| 2024.01 | Research visit at University of Genoa (14–17.01.24) |
| 2023.12 | Research visit at ETH Zürich (10–13.12.23) |
| 2023.07 | Participation in Erwin Schrödinger Institute program “Spectral Theory and Mathematical Relativity”, Vienna (29.06–29.07.23) |
| 2022.10 | Research visit at ICMAT, Madrid (12–16.10.22) |
| 2020.08 | Research visit at Universität Leipzig (19–22.08.20) |
| 2020.07 | Research visit at Universität Leipzig (11–15.07.20) |
| 2019.11 | Research visit at Massachusetts Institute of Technology (25–29.11.19) |
| 2019.07 | Research visit at TU München (21–24.07.19) |
| 2018.07 | Research visit at Dublin City University (01–07.07.18) |
| 2018.05 | Research visit at TU München (27–31.05.18) |
| 2017.10 | Participation in Fields Institute thematic program “Geometric Analysis”, Toronto |
| 2017.03 | Research visit at Université Paris–Sud (21–23.03.17) |
| 2016.09 | Research visit at TU München (05–08.09.16) |
| 2016.06 | Research visit at the University of Warsaw (27–30.06.16) |
| 2016.01 | Research visit at Universität Göttingen (13–16.01.16) |
| 2015.09 | Participation in Erwin Schrödinger Institute program “Modern Theory of Wave Equations”, Vienna (04–12.09.15) |
| 2015.06 | Participation in Research in Paris Program “Géométrie en dimension infinie et théorie quantique du champ de gravitation”, Institut Henri Poincaré, Paris (22–26.06.15) |
| 2013.01 | Research visit at McGill University, Montréal (13–21.02.13) |

- 2012.12 Participation in Junior Hausdorff Trimester Program “Mathematical Physics”, HIM Bonn (4–6.12.12)
- 2012.05 Research visit at Université Paris–Sud (21–27.05.12)
- 2009.09 Research internship at Université de Cergy–Pontoise

■ INVITED SEMINAR TALKS, LECTURES

- 2022–date Universität Freiburg · Cergy-Pontoise / McGill University (online) · TU Berlin · Universität Münster · Freiburg Institute for Advances Studies · University of Luxembourg · Ritsumeikan University · Utrecht University · ICMAT Madrid · University of Copenhagen · Bilbao / Bordeaux / Toulouse · Cergy Paris Université · IAMP One World Mathematical Physics seminar (online) · University of Amsterdam · University of Genoa · TU Delft
- 2018–21 Massachusetts Institute of Technology · TU München · Universität Potsdam · Université Paris 13 · MSRI Berkeley · École Polytechnique / IHES · CPT Marseille · University of Leeds · Universität Leipzig · Northwestern University (online) · Stanford University (online) · Paris–Saclay / Université de Paris / Sorbonne Université (online) · Cracow / Poznan / Warsaw (online)
- 2015–17 UC Berkeley (x2) · Université Paris-Sud · Université Pierre et Marie Curie (Paris 6) · University of Oxford · University of Cambridge · Johns Hopkins University · Universität Potsdam · Cardiff University · University of York · Universität Leipzig · University of Warsaw · Université de Lorraine (Metz) · TU München · Universität Göttingen · Universität Hannover
- 2012–14 Université Paris–Sud · HIM Bonn · Universität Tübingen · Universität Hamburg, Université de Bordeaux 1 · University of Warsaw (x2) · McGill University · Université Lyon 1 · IAS Bonn · IRMAR Rennes · Institut Henri Poincaré (Paris) · Institut Fourier (Grenoble) · Université de Cergy-Pontoise

■ CONFERENCE TALKS

- 2024.07 *9th European Congress of Mathematics, mini-symposium Spectral theory of differential operators in mathematical physics, Sevilla*
- 2023.07 *Spectral Theory and Mathematical Relativity, ESI Vienna*
- 2023.03 *Himeji Conference on Partial Differential Equations, Himeji*
- 2022.09 *Noncommutative geometry: metric and spectral aspects, Cracow*
- 2022.07 *AMS-SMF-EMS Joint International Meeting, Grenoble*
- 2022.07 *Microlocal Analysis and PDEs, London*
- 2022.06 *Dirac Operators in Topology, Geometry, and Representation Theory, Cortona*
- 2022.03 *Aspects of Gravity, Mathematics and Physics, École Polytechnique, Palaiseau*
- 2021.08 *13th International ISAAC congress, Ghent*

2021.05 *Geometry through spectral functionals*, Cracow

2020.10 *Higher structures emerging from renormalisation*, ESI Vienna

2019.09 *Introductory Workshop: Microlocal Analysis*, MSRI Berkeley

2019.07 *LMU München – Regensburg – TU München meeting*, Regensburg

2019.06 *Fredholm Theory of Non-elliptic operators*, Leeds

2019.01 *LMU München – Regensburg – TU München meeting*, München

2018.08 *Physics and Mathematics of Quantum Field Theory*, BIRS, Banff

2018.07 *ICMP 2018 congress*, Montréal

2018.03 *DPG Spring Meeting 2018*, Würzburg

2017.11 *Analysis and Geometry in Cargèse*, Institut d'Etudes Scientifiques de Cargèse

2017.06 *Quantum Field Theories on Curved Space-Times*, Lyon

2017.05 *Hyperbolic equations and mathematical physics*, Bordeaux

2017.01 *Microlocal analysis: a tool to explore the quantum world*, Genoa

2016.10 *Final AARG meeting: Asymptotic Analysis in General Relativity*, Roscoff

2016.01 *Local Quantum Pathroads Workshop*, Göttingen

2015.05 *Annual meeting of the Deutsche Mathematiker-Vereinigung*, Hamburg

2015.05 *Hyperbolic Equations on Spacetimes: Stability, Microlocal Analysis and Quantum Field Theory*, Erwin Schrödinger Institute, Vienna

2015.05 *Journée Théorie CPTGA*, Grenoble

2014.11 *Journées EDP Rhône-Alpes-Auvergne*, Lyon

2014.09 *Operator and Geometric Analysis on Quantum Theory*, Levico Terme (Trento)

2014.05 *Algebraic Quantum Field Theory: Its Status and Its Future*, ESI Vienna

2014.04 *34th Local Quantum Pathroads Workshop*, Erlangen

2013.05 *32nd Workshop Foundations and Constructive Aspects of QFT*, Wuppertal

2012.08 *Poster, XVII International Congress on Mathematical Physics*, Aalborg

2012.06 *30th Workshop Foundations and Constructive Aspects of QFT*, Paderborn

2011.07 *28th Workshop Foundations and Constructive Aspects of QFT*, Göttingen

2011.06 *Meeting of the Research Training Group 1493*, Goslar

■ MINI LECTURE SERIES

2024.08 “Geometric singular analysis”, GQT Summer School

2022.12 “Quantum fields and thermodynamics on curved spacetimes”, Université de Toulon

2020.07 “Microlocal analysis: a practical guide”, Universität Leipzig

2019.09 “An invitation to Quantum Field Theory on curved spacetimes”, MSRI Berkeley

- 2018.08 “Microlocal methods in quantum field theory on curved spacetimes”, summer school *Microlocal Methods in Global Analysis*, Universität Göttingen
- 2015.01–04 “Quantum fields on curved spacetime: the microlocal point of view”, Stanford University
- 2014.09–10 “Parametrix for the Klein-Gordon equation and Hadamard states”, Institut Fourier, Université Grenoble 1

■ TEACHING

2023/24 [~ 3h of lectures ×16 weeks]:

- Mathematical Methods 3, lectures – BSc level
- Functional Analysis, lectures – BSc level

2022/23 [~ 6h of lectures/tutorials ×24 weeks]:

- Differential Geometry, lectures – M1 level
- Advanced Differential Geometry, lectures – M2 level
- Statistics, lectures and tutorials – M1 level
- student internships (coordination) – M1 level

2021/22 [~ 6h of lectures/tutorials ×24 weeks]:

- Differential Geometry, lectures – M1 level
- Statistics, lectures and tutorials – M1 level
- student internships (coordination) – M1 level
- Linear and Bilinear Algebra, lectures – L3 level

2020/21 [~ 6h of lectures/tutorials ×12 weeks]:

- Differential Geometry, lectures – M1 level
- student internships (coordination) – M1 level
- Linear and Bilinear Algebra, lectures – L3 level
- *préparation agrégation externe* – M2 level

2019/20 [~ 6h of lectures/tutorials ×24 weeks]:

- Advanced Calculus, lectures – M1 level
- student internships (coordination and supervision) – M1 level

- Linear and Bilinear Algebra, lectures and tutorials – L3 level
- *préparation agrégation externe* – M2 level

2018/19 [~ 7.5h of tutorials/lectures ×24 weeks]:

- Magistère de Physique lectures/tutorials – M1-M2 level (mathematical physics, spectral theory)
- MAT367 tutorials – L3 level (numerical methods)
- MAT103 lectures/tutorials – L1 level (analysis and algebra for biology students)
- MAT202 tutorials – L1 level (linear algebra)
- MAT204 tutorials – L1 level (calculus and linear algebra)

2017/18 [~ 7.5h of tutorials/lectures ×12 weeks]:

- MAT202 lectures/tutorials – L1 level (linear algebra)
- MAT203 tutorials – L1 level (linear algebra)

2016/17 [~ 7.5h of tutorials/lectures ×24 weeks]:

- MAT304 tutorials – L2 level (linear algebra, analysis in several variables)
- MAT307 tutorials – L2 level (curves, differential equations, computer algebra)
- MAT103 lectures/tutorials – L1 level (analysis and algebra), international group (*in English*)
- MAT206 lectures/tutorials – L1 level (differential equations and population dynamics), international group (*in English*)
- MAT202 tutorials – L1 level (linear algebra)

2015/16 [~ 7.5h of tutorials/lectures ×24 weeks]:

- MAT234 tutorials – L2 level (linear algebra, analysis in several variables)
- MAT11a lectures/tutorials – L1 level (analysis and applications in biology/chemistry), international group (*in English*)
- MAT122 tutorials – L1 level (basic analysis and linear algebra)
- MAT123 lectures/tutorials/oral exams – L1 level (analysis)

2014/15 [~ 7.5h of tutorials/lectures ×12 weeks]:

- MAT234 tutorials – L2 level (linear algebra, analysis in several variables)
- MAT11a lectures/tutorials – L1 level (analysis and applications in biology/chemistry), international group (*in English*)

■ SUPERVISION AND RELATED ACTIVITIES

- 2023–... Supervisor, PhD thesis: Ashkan Sadat Kyae (Utrecht University)
- 2023–2024 Mentor, Post-doc: Nicolas Frantz (Cergy Paris Université)
- 2023–2024 Co-mentor, Post-doc: Christiane Klein (Cergy Paris Université / Université Grenoble Alpes)
- 2023 Dissertation committee member, PhD thesis: Nicolas Frantz (Université de Lorraine),
supervisor: Prof. Jérémy Faupin
- 2023 Dissertation committee member, PhD thesis: Pascal Millet (Université Grenoble Alpes),
supervisor: Prof. Dietrich Häfner
- 2018 Supervisor, MSc thesis: Ashkan Sadat Kyae (Sorbonne Université)
- 2022 Reviewer and dissertation committee member, PhD thesis: Brice Flamencourt (Université Paris-Saclay, Orsay),
supervisor: Prof. Konstantin Pankrashkin, *co-supervisor*: Prof. Andrei Moroiianu
- 2022 Host, PhD visiting fellowship: Lennart Ronge (Universität Bonn)
- 2021–... Supervisor, PhD thesis: Ruben Zeitoun (Cergy Paris Université / ENS Lyon)
- 2021 Reviewer, PhD thesis: Alessio Marta (University of Milan)
supervisor: Prof. Livio Pizzocchero, *co-supervisor*: Prof. Claudio Dappiaggi
- 2021 Reviewer and dissertation committee member, PhD thesis: Sebastian Hannes (Universität Potsdam)
supervisor: Prof. Christian Bär
- 2021 Reviewer and dissertation committee member, PhD thesis: Jack Borthwick (Université de Bretagne Occidentale, Brest)
supervisor: Prof. Jean-Philippe Nicolas
- 2021 Host, PhD visiting fellowship: Sascha Lill (Universität Tübingen)
- 2019 Supervisor, M1 research project: Dawei Shen (École Polytechnique)
- 2019 Supervisor, M1 research project: Aurélien Beaufrère (Université Grenoble Alpes)
- 2018 Supervisor, MSc thesis: Étienne Blanco (Université Grenoble Alpes)
- 2017 Supervisor, BSc internship: Julian Meusel (Universität Würzburg)
- 2017 Supervisor, MSc thesis: Clément Tarou (Université de Tours)
- 2017 Reviewer, PhD thesis: Nicolò Drago (University of Genova)
supervisor: Prof. Nicola Pinamonti
- 2016 Sponsor of two French Government Scholarship holders, Student sponsorship program of the French Government

■ PROFESSIONAL SERVICE

Event organization:

2024

Organizer (with Annegret Burtscher and Andrea Fuster), *2nd Dutch Mathematical Relativity Day*, Utrecht, 13.06.24

2024

Organizer (with Dietrich Häfner, Frédéric Hélein, Andrea Puhm, András Vasy, Bernard Whiting and Elisabeth Winstanley), thematic programme *Quantum and classical fields interacting with geometry*, Institut Henri Poincaré, Paris, 18.03–26.04.24

2024

Organizer (with Marcello Seri and Konstatin Pankrashkin), seminar Groningen–Oldenburg–Utrecht in mathematical physics, Groningen, 18.03–26.04.24

2024

Organizer (with Laurent Bruneau, Louis Garrigue, Constanza Rojas-Molina and Armen Shirikyan), *16th Meeting of the GDR DynQua “Quantum Dynamics”*, CY Cergy Paris Université, 31.01–02.02.24

2023

Organizer (with Flora Koukiou, Armen Shirikyan and Vojkan Jaksič), *Frontiers in mathematical physics*, Neuville-sur-Oise, 26–28.06.23

2022

Organizer (with Marcin Napiórkowski), *Symposium in mathematical physics*, Paris, 05–06.09.22

2022

Organizer, mini-workshop *Quantum effects induced by geometry*, Freiburg im Breisgau, 07–08.07.22

2021

Organizer, Cergy/Paris/Orsay seminar *Quantum fields interacting with geometry*

2020

Organizer (with Claudio Dappiaggi and Jacob Schach Møller), conference *Scattering, microlocal analysis and renormalisation*, Institut Mittag-Leffler, 01–05.06.20 (online)

2019

Organizer, conference *Relativistic Mathematical Physics in Grenoble*, Grenoble, 13–15.05.19

2018

Organizer (with Dietrich Häfner), conference *Quantum fields, scattering and spacetime horizons: mathematical challenges*, Les Houches, 22–25.05.18

2016–2019

Organiser (with Evelyne Miot) , *Mathematical Physics* seminar

2016–2019

Organiser (with Dietrich Häfner), workgroup seminar *General Relativity*

Professional duties, service to the community:

2024–date

Member of bachelor theses committee, Department of Mathematics, Utrecht University

2023

Member of a hiring committee for an Assistant Professor position, The Netherlands

2023

Member of a hiring committee for a Professor position, France

2023

Council member, *Department of Mathematics* (Cergy Paris Université)

2022

Member of two hiring committees for Maître de Conférences positions, France

2022

Chair of a hiring committee for a tenure-track position, France

2022

Member of a habilitation committee, France

2022

Evaluator for various CNRS programs, France

2019–2023

Director of studies and admissions officer, Master 1 program in mathematics, Cergy Paris Université

2019

Council member, *Institut Fourier* (UMR 5582)

2017–2019

Council member, *Teaching and Research Department in Computer Science, Mathematics and Applied Mathematics* (UFR IM²AG, Université Grenoble Alpes)

Associations membership, recent outreach activities:

2024

Open public talk, *Institut Henri Poincaré*, Paris

2017–date

Member of the *International Association of Mathematical Physics*

2012–2018

Member of the *Deutsche Physikalische Gesellschaft* (German Physics Society)

■ **EDITORIAL AND REVIEWING SERVICE**

Referee for journals including:

Inventiones Mathematicae · *Communications in Mathematical Physics* · *Journal of the European Mathematical Society (JEMS)* · *Letters in Mathematical Physics* · *Annales Henri Poincaré* · *Journal of Mathematical Physics* · *Analysis & PDE* · *Communications in Partial Differential Equations* · *Annales de l'École Normale Supérieure* · *Annales de l'Institut Fourier* · *Publications Mathématiques de l'IHES* · *Bulletin des Sciences Mathématiques* · *Mathematical Physics, Analysis and Geometry* · *Revue Roumaine de Mathématiques Pures et Appliquées* · *Communications in Analysis and Geometry* · *Mathematische Nachrichten* · *Communications in Contemporary Mathematics* · *International Journal of Modern Physics E* · *Reviews in Mathematical Physics* · *General Relativity and Gravitation* · *Symmetry, Integrability and Geometry: Methods and Applications (SIGMA)* · *Canadian Journal of Physics* · *Classical and Quantum Gravity* · *Inverse Problems* · *Journal of Mathematical Analysis and Applications* · *Journal of Spectral Theory* · *Advances in Theoretical and Mathematical Physics*

Grant proposal reviewer:

Deutsche Forschungsgemeinschaft (DFG) · *Freiburg Institute for Advanced Studies*

Editorial board member:

Tunisian Journal of Mathematics

(published by MSP, Berkeley; see [about the journal](#) and [editorial board](#))