



Alessia Nota

Curriculum Vitae

Personal details

First name Alessia
Family name Nota
Date of birth 19/04/1987
Place of birth Rome (IT)
Nationality Italian

Current position

01/09/2020 **Ricercatore di tipo B (tenure-track associate professor) in Probability and Mathematical Statistics (SSD MAT/06)**
Research Institution: Department of Information Engineering, Computer Science and Mathematics at Università degli Studi dell'Aquila.

Previous positions

01/01/2017 **Post Doctoral Researcher**
–31/08/2020 Research Institution: Institute for Applied Mathematics, University of Bonn.
Postdoctoral mentor: Prof. Dr. Juan J. L. Velázquez.
SFB Postdoc Position. Member of Collaborative Research Centre 1060 (SFB 1060): The Mathematics of Emergent Effects, project B5, funded by the German Research Foundation (DFG).

01/01/2019–
31/08/2020 **Investigator of the Cluster of Excellence: Hausdorff Center for Mathematics, University of Bonn**, Research Area C1 (Mathematical modeling of matter and materials).

01/12/2015 **Post Doctoral Researcher**
–31/12/2016 Research Institution: Institute for Applied Mathematics, University of Bonn.
Postdoctoral mentor: Prof. Dr. Juan J. L. Velázquez.
SFB Postdoc Position. Member of Collaborative Research Centre 1060 (SFB 1060): The Mathematics of Emergent Effects, project B5, funded by the German Research Foundation (DFG).

01/01/2015 **Post Doctoral Researcher**
–30/11/2015 Research Institution: Department of Mathematics and Statistics, University of Helsinki.
Postdoctoral mentor: Prof. Dr. Jani M. Lukkarinen..

5/2011–7/2011 **Research fellowship for post-graduate students**
Research Institution: International School for Advanced Studies (SISSA).
Mentors: Prof. Gianfausto Dell’Antonio, Prof. Ludwik Dabrowski.
(Position with scholarship)

Formation

01/11/2011 **Ph.D. in Mathematics**
–22/12/2014 *Dipartimento di Matematica Guido Castelnuovo*, Sapienza, Università di Roma.
(Position with scholarship)

Ph.D. Thesis

Title *From microscopic dynamics to macroscopic equations:
scaling limits for the Lorentz gas*

Supervisor Prof. Mario Pulvirenti

Defence date December 22, 2014

Education

12/2008–3/2011 **Master in Mathematics**
Dipartimento di Matematica Guido Castelnuovo, Sapienza, Università di Roma.

Master Thesis

Title *Teoremi adiabatici e applicazioni all’Effetto Hall quantistico*
(*Adiabatic theorems and applications to the quantum Hall Effect*)

Supervisor Prof. Gianluca Panati

Final grade 110/110 cum laude

10/2005–10/2008 **Bachelor in Mathematics**
Dipartimento di Matematica Guido Castelnuovo, Sapienza, Università di Roma.

Bachelor Thesis

Title *Onde viaggianti per equazioni di reazione-diffusione*
(*Traveling waves for reaction-diffusion equations*)

Supervisor Prof. Corrado Mascia

Final grade 110/110 cum laude

2000–2005 **High School Diploma**, *Liceo Scientifico Statale “Augusto Righi”*, Roma.

Final grade 100/100 cum laude.

Research

Kinetic theory, statistical mechanics, analysis of PDE, quantum mechanics.

- Rigorous derivation of effective evolution equations (Boltzmann equation, Landau equation, Vlasov equation, Non Markovian Boltzmann equations) from deterministic or stochastic particle systems;
- Derivation of macroscopic equation and phenomenological laws (Fourier’s and Fick’s law) from particle systems under diffusive limit;
- Well-posedness theory, qualitative analysis and asymptotic behaviour of the solutions of these macroscopic evolution equations;
- Dynamics of particle systems with long range interactions;
- Analysis of correlations for strongly correlated random variables and central limit theorems;
- Rigorous derivation of coagulation equations (Smoluchowski equation) from mechanical particle systems, analysis of coalescence processes and related continuum percolation theory, well-posedness theory, qualitative analysis and asymptotic behaviour of the solutions of these equations.

Research Papers

1. **A Diffusion Limit for a Test Particle in a Random Distribution of Scatterers**
Giada Basile, Alessia Nota and Mario Pulvirenti
Journal of Statistical Physics, Vol. 155, Issue 6, pp. 1087-1111 (2014)
2. **Diffusive limit for the random Lorentz gas**
Alessia Nota
From Particle Systems to Partial Differential Equations II, Springer Proceedings in Mathematics & Statistics, Vol. 129, pp. 273-292 (2015)
3. **Derivation of the Fick’s Law for the Lorentz Model in a low density regime**
Giada Basile, Alessia Nota, Federica Pezzotti and Mario Pulvirenti
Communication in Mathematical Physics, Vol. 336, Issue 3, pp. 1607-1636 (2015)

4. **Derivation of the linear Landau equation and linear Boltzmann equation from the Lorentz model with magnetic field**
Matteo Marcozzi, Alessia Nota
Journal of Statistical Physics, Vol.162, Issue 6, pp. 1539-1565 (2016)
5. **Harmonic chain with velocity flips: thermalization and kinetic theory**
Jani Lukkarinen, Matteo Marcozzi and Alessia Nota
Journal of Statistical Physics, Vol. 165, Issue 5, pp. 809-844 (2016)
6. **On the growth of a particle coalescing in a Poisson distribution of obstacles**
Alessia Nota, Juan J. L. Velázquez
Communication in Mathematical Physics, Vol. 354, Issue 3, pp. 957-1013 (2017)
7. **On the theory of Lorentz gases with long range interactions**
Alessia Nota, Sergio Simonella, Juan J. L. Velázquez
Reviews in Mathematical Physics, Vol. 30 No. 3, 1850007 (2018)
8. **Summability of connected correlation functions of coupled lattice fields**
Jani Lukkarinen, Matteo Marcozzi and Alessia Nota
Journal of Statistical Physics, Vol. 171, Issue 2, pp. 189-206 (2018)
9. **Self-similar profiles for homoenergetic solutions of the Boltzmann equation: particle velocity distribution and entropy**
Richard D. James, Alessia Nota, Juan J.L. Velázquez
Archive for Rational Mechanics and Analysis, Vol. 231, Issue 2, pp. 787-843 (2019)
10. **Self-similar asymptotic behavior for the solutions of a linear coagulation equation**
Barbara Niethammer, Alessia Nota, Sebastian Throm, Juan J.L. Velázquez
Journal of Differential Equations, Vol. 266, Issue 1, pp. 653-715 (2019)
11. **Long time asymptotics for homoenergetic solutions of the Boltzmann equation. Collision-dominated case**
Richard D. James, Alessia Nota, Juan J.L. Velázquez
Journal of Nonlinear Science, (2019) Vol. 29, Issue 5, pp. 1943–1973 (2019)
12. **Kinetic description of a Rayleigh Gas with annihilation**
Bertrand Lods, Alessia Nota, Raphael Winter
Journal of Statistical Physics, Vol. 176, Issue 6, 1434–1462 (2019)
13. **A Kac model for annihilation of particles**
Bertrand Lods, Alessia Nota, Federica Pezzotti
Journal of Nonlinear Science, Vol. 30, 1455-1501 (2020)
14. **Long time asymptotics for homoenergetic solutions of the Boltzmann equation. Hyperbolic-dominated case**
Richard D. James, Alessia Nota, Juan J.L. Velázquez
Nonlinearity, Vol. 33, Issue 8, 3781-3815 (2020)

15. **Self-similar asymptotics for a modified Maxwell-Boltzmann equation in systems subject to deformations**
Alexander Bobylev, Alessia Nota, Juan J. L. Velázquez
Communication in Mathematical Physics, Vol. 380, 409–448 (2020)
15. **Self-similar asymptotics for a modified Maxwell-Boltzmann equation in systems subject to deformations**
Alexander Bobylev, Alessia Nota, Juan J. L. Velázquez
Communication in Mathematical Physics, Vol. 380, 409–448 (2020)
16. **Stationary non-equilibrium solutions for coagulation systems**
Marina Ferreira, Jani Lukkarinen, Alessia Nota, Juan J.L. Velázquez
Archive for Rational Mechanics and Analysis, Vol. 240, 809–875 (2021)
17. **Interacting particle systems with long range interactions: scaling limits and kinetic equations**
Alessia Nota, Juan J. L. Velázquez, Raphael Winter
Atti Accad. Naz. Lincei Rend. Lincei Mat. Appl., Vol. 32 , Issue 2, 335-377 (2021)
18. **Localization in stationary non-equilibrium solutions for multicomponent coagulation systems**
Marina Ferreira, Jani Lukkarinen, Alessia Nota, Juan J.L. Velázquez
Communication in Mathematical Physics Vol. 388, Issue 1, 479–506 (2021)
19. **Derivation of the generalized linear Boltzmann equation for magnetotransport**
Alessia Nota, Chiara Saffirio, Sergio Simonella
Annales de l'Institut Henri Poincaré Vol. 58, Issue 2, 1228-1243 (2022)
20. **Interacting particle systems with long range interactions: approximation by tagged particles in random fields**
Alessia Nota, Juan J. L. Velázquez, Raphael Winter
To appear in *Atti Accad. Naz. Lincei Rend. Lincei Mat. Appl.*, arXiv:2103.09740 (2020)
21. **Homoenergetic solutions of the Boltzmann equation: the case of simple-shear deformations**
Alessia Nota, Juan J. L. Velázquez
Mathematics in Engineering, Vol. 5, Issue 1, 1-25 (2023)

Conference Proceedings

1. **Kinetic description for the Lorentz Gas with long range interactions**
Alessia Nota
In *Oberwolfach Reports, Classical and Quantum Mechanical Models of Many-Particle Systems*, Report No. 56/2017, DOI: 10.4171/OWR/2017/56
2. **On the derivation of linear kinetic equations from a Lorentz Gas with long-range interactions**
Alessia Nota
In *Oberwolfach Reports, Large Scale Stochastic Dynamics*, Report No. 42/2019, DOI: 10.4171/OWR/2019/42

Preprints

1. **Multicomponent coagulation systems: existence and non-existence of stationary non-equilibrium solutions**
Marina Ferreira, Jani Lukkarinen, Alessia Nota, Juan J.L. Velázquez
arXiv:2103.12763
2. **Asymptotic localization in multicomponent mass conserving coagulation equations**
Marina Ferreira, Jani Lukkarinen, Alessia Nota, Juan J.L. Velázquez
arXiv:2203.08076
3. **Non-power law constant flux solutions for the Smoluchowski coagulation equation**
Marina Ferreira, Jani Lukkarinen, Alessia Nota, Juan J.L. Velázquez
arXiv:2207.09518

Scientific Communications

Upcoming

04/2022 *Mathematical Modeling Seminar*, Weierstrass-Institut Berlin für Angewandte Analysis und Stochastik.

Past

02/2022 *Nonlinear PDEs Seminar*, Institut für Analysis, Karlsruher Institut für Technologie.

02/2022 *Mathematical Physics Seminar*, Dipartimento di Matematica G. Castelnuovo, Sapienza, Università di Roma.

02/2022 *PDEs in presence in Rome*, Sapienza. University of Rome.

03/2022 *SIAM Conference on Analysis of Partial Differential Equations (PD22)*, Berlin (Online).

09/2021 *Congresso Nazionale SIMAI 2020+2021*, Parma and online.

08/2021 *HCM Symposium 2021*, Hausdorff Center for Mathematics, Bonn.

07/2021 *Encontro Nacional da Sociedade Portuguesa de Matemática 2021 (ENSPM2021)*, Portugal (Online).

05/2021 *SIAM Conference on Mathematical Aspects of Materials Science*, BCAM, Bilbao (Online).

03/2021 *Applied PDEs Seminar (online)*, Imperial College, London.

01/2021 *Analysis and Mathematical Physics Seminar (online)*, International School for Advanced Studies (SISSA). Trieste.

06/2020 *Seminar*, Stochastic Modelling in L'Aquila (SMAQ), University of L'Aquila and GSSI.

05/2020 *Oberseminar Analysis - Probability*, Max Planck Institute, Leipzig. (Online)

04/2020 *Analysis Seminar*, Institute for Applied Mathematics, University of Bonn. (Online)

- 12/2019 *SIAM Conference on Analysis of Partial Differential Equations (PD19)*, La Quinta, California.
- 11/2019 *La genesi dei modelli: teoria, simulazioni e dati*, Accademia dei Lincei, Roma.
- 11/2019 *LIA COPDESC and Lions Magenes Days*, Laboratoire Jacques-Louis Lions, Sorbonne Université and Université Paris-Diderot.
- 10/2019 *Advances in Kinetic Theory*, Chongqing University, Chongqing, China.
- 09/2019 *Large Scale Stochastic Dynamics*, Mathematisches Forschungsinstitut Oberwolfach (MFO), Oberwolfach.
- 09/2019 *Analysis Seminar*, Department of Applied Mathematics, TU Delft.
- 09/2019 *XXI Congresso U.M.I. (Unione Matematica Italiana)*, Pavia.
- 09/2019 *Seminar*, Department of Mathematics, University of Pavia.
- 07/2019 *Kinetic Theory Trimester Seminar*, Hausdorff Research Institute for Mathematics, University of Bonn.
- 07/2019 *Seminar*, Mathematisches Institut, University of Münster.
- 06/2019 *Analytical and computational problems for mixtures and plasma dynamics*, Hausdorff Research Institute for Mathematics, University of Bonn.
- 06/2019 *Women in PDEs @ Vienna*, University of Wien.
- 06/2019 *Symposium in Mathematical Physics*, University of Heidelberg.
- 05/2019 *"Journeys of Women in Mathematics" in honor to Maryam Mirzakhani*, University of L'Aquila.
- 12/2018 *"Konstanz Women in Mathematics-Festtage"*, University of Konstanz.
- 11/2018 *Nonlinear Phenomena in Stockholm: Kinetic Meets Dispersive*, KTH Royal Institute of Technology. Stockholm.
- 10/2018 *Recent Trends in Kinetic Modelling and Related Fields*, Politecnico di Torino.
- 09/2018 *Joint meeting of the Italian Mathematical Union, the Italian Society of Industrial and Applied Mathematics and the Polish Mathematical Society*.
- 05/2018 *German Chapter Conference 2018 - EWM*, University of Heidelberg.
- 04/2018 *PDE and Mathematical Physics Seminar*, Institute of Mathematics, University of Zürich.
- 03/2018 *Mathematical Physics Seminar, Department of Mathematics, Politecnico di Torino*.
- 12/2017 *Mathematical Physics Seminar*, Department of Mathematics "F. Brioschi", Politecnico di Milano.
- 12/2017 *Classical and Quantum Mechanical Models of Many-Particle Systems*, Mathematisches Forschungsinstitut Oberwolfach (MFO). Oberwolfach.
- 08/2017 *Seminar*, Institute for Mathematics and its Applications, University of Minnesota, Minneapolis.
- 12/2016 *Mathematical Physics & PDEs Seminar*, LAGA, Université Paris 13. Paris.
- 11/2016 *Geometry and Analysis Seminar*, Mathematical Institute, University of Oxford. Oxford.
- 11/2016 *Analysis seminar*, Institute for Applied Mathematics, University of Bonn.

- 10/2016 *Kinetic Theory and its neighbours*, GSSI, Gran Sasso Science Institute, L'Aquila.
- 10/2016 *The Mathematics of Disorder - Young Women in Probability and Analysis 2016*, University of Bonn.
- 04/2016 *Analysis seminar*, Institute for Applied Mathematics, University of Bonn.
- 01/2016 *CRC seminar*, Institute for Applied Mathematics, University of Bonn.
- 01/2016 *Geometric Analysis and Partial Differential Equations seminar*, University of Cambridge.
- 10/2015 *Tullio Levi-Civita lecture*, Department of Mathematics, Sapienza, University of Rome.
- 7/2015 *Nonlinear evolutions: Kinetic equations and defect dynamics*, Hausdorff School, University of Bonn.
- 06/2015 *Periodic and Ergodic Spectral Problems Seminar*, Isaac Newton Institute for Mathematical Sciences, Cambridge.
- 03/2015 *Seminar series: "Mathematical Models for Kinetic Theory"*, Department of Mathematics, Sapienza, University of Rome.
- 02/2015 *Bernoullis Tafelrunde*, Mathematisches Institut, Universität Basel.
- 12/2014 *CRC Seminar*, Institute for Applied Mathematics, University of Bonn.
- 12/2014 *Mathematical Physics Seminar*, Dipartimento di Matematica, Sapienza, Università di Roma.
- 10/2014 *Mathematical Physics Seminar*, University of Helsinki.
- 07/2014 *Mathematical Physics, Analysis and Stochastics*, Summer School at Universität Heidelberg.
- 05/2014 *Young Women in Probability 2014*, University of Bonn.
- 01/2014 *HFAKT Seminar*, University of Bristol.
- 12/2013 *Kinetic Theory Methods Toward Applications*, Department of Mathematics, Politecnico di Torino.
- 12/2013 *Particle systems and PDE's - II*, Braga, Portugal.
- 06/2013 *Kinetic Description of Multiscale Phenomena*, Heraklion, Crete.
- 09/2012 *XXXVII Summer School on Mathematical Physics*, Ravello.

Summer Schools (INdAM)

- 09/2012 **XXXVII Summer School on Mathematical Physics**, Ravello, IT.
- 06/2009-08/2009 **Scuola Matematica Interuniversitaria (SMI) Perugia**, IT.
Completed courses: Functional Analysis, Partial Differential Equations in Mathematical Physics.

Visiting Professorships

- 10/2020–11/2020 **Selected for a Visiting Professorship Position, University of Torino.**
- 10/2019–11/2019 **Selected for a Visiting Professorship Position, University of Torino.**

Short Visits to International Research Institutions

- 10–11/2019 **University of Torino.**
- 10/2018 **University of Zurich.**
- 10/2018 **Politecnico di Torino.**
- 06/2018 **University of Oxford.**
- 04/2018 **University of Zurich.**
- 03/2018 **University of Torino.**
- 03/2018 **Université Paris Diderot.**
- 12/2017 **Politecnico di Milano.**
- 12/2017 **Mathematisches Forschungsinstitut Oberwolfach.**
- 08/2017 **Institute for Mathematics and its Applications, University of Minnesota.**
- 06/2017 **Institute Henri Poincaré,**
Thematic trimester: Stochastic Dynamics Out of Equilibrium.
- 04/2017 **Technische Universität München.**
- 03/2017 **University of Torino.**
- 12/2016 **LAGA, Université Paris 13.**
- 11/2016 **University of Oxford.**
- 03/2016 **University of Torino.**
- 01/2016 **DPMMS, University of Cambridge.**
- 01/2016 **University of Torino.**
- 10/2015 **Sapienza, University of Rome.**
- 06/2015 **Isaac Newton Institute for Mathematical Sciences.**
- 03/2015 **Institute Henri Poincaré (IHP).**
- 02/2015 **University of Basel.**
- 12/2014 **Hausdorff Center for Mathematics.**
- 09/2014 **Kumpula Campus, University of Helsinki.**
- 05/2014 **University of Bristol.**
- 01/2014 **University of Bristol.**

Teaching Experience

- January 2022 **From microscopic Hamiltonian dynamics to collisional kinetic equations. The case of the Boltzmann equation, (*Ph.D. course*),** Gran Sasso Science Institute (GSSI), L'Aquila.
- January 2021 **An introduction to Kinetic Theory of Gases and the Boltzmann equation, *Ph.D. course*,** Gran Sasso Science Institute (GSSI), L'Aquila.
- February 2021 **From microscopic dynamics to macroscopic equations: scaling limits for the Lorentz Gas, *Ph.D. course*,** Università degli Studi dell'Aquila.
- Summer Term 2020/2021 **Calcolo delle Probabilità e Statistica Matematica, *Università degli Studi dell'Aquila* .**

- October/November 2020 **Measure Theory and Stochastic Processes**, *Part of the lecture course “Mathematics for Finance”*, University of Torino (Visiting Professor).
- Summer Term 2019/2020 **The rigorous mathematical approach to Kinetic Theory of Gases and Plasmas**, *Lecture course*, Institute for Applied Mathematics, University of Bonn.
- October/November 2019 **Measure Theory and Stochastic Processes**, *Part of the lecture course “Mathematics for Finance”*, University of Torino (Visiting Professor).
- April 2019 **Two lectures on direct and inverse scattering in Quantum Mechanics**, Institute for Applied Mathematics, University of Bonn.
- Winter Term 2017/2018 **On the mathematical theory of Landau Damping**, *Graduate Seminar on Analysis (S4B1)*, Institute for Applied Mathematics, University of Bonn.
- Winter Term 2016/2017 **Spectral Theory in Quantum Mechanics**, *Graduate Seminar on Analysis (S4B1)*, Institute for Applied Mathematics, University of Bonn.
- Summer Term 2015/2016 **Scaling limits for particle systems**, *Graduate Seminar on Analysis (S4B1)*, Institute for Applied Mathematics, University of Bonn.
- 10/2014–12/2014 **OFA course in Mathematics (Analysis)**, *Sapienza*, Università di Roma.
- 10/2013–2/2014 **Teaching assistant for the Linear Algebra course at the Mathematics Department Guido Castelnuovo**, *Sapienza*, Università di Roma.

From December 2015 to September 2020 I served as assistant for the exams of the Functional Analysis group, University of Bonn.

Thesis Supervisions

- **Second advisor for Master Thesis**
Candidate: Cintia Pacchiano, Institute for Applied Mathematics, University of Bonn
First Advisor: Prof. Dr. Juan J. L. Vélazquez
Thesis: The Hilbert Expansions in Kinetic Theory
Defence date: 16/03/2018
- **Second advisor for Master Thesis**
Candidate: Sarah Schreyer, Institute for Applied Mathematics, University of Bonn
First Advisor: Prof. Dr. Juan J. L. Vélazquez
Thesis: Drift-Diffusion Equations for Dye-Sensitized Solar Cells
Defence date: 02/11/2018
- **Second advisor for Master Thesis**
Candidate: Inigo Urtiaga Erneta, Institute for Applied Mathematics, University of Bonn
First Advisor: Prof. Dr. Juan J. L. Vélazquez
Thesis: On the well-posedness for coagulation equations
Defence date: 02/07/2019
- **Second advisor for Bachelor Thesis**
Candidate: Elena Demattè, Institute for Applied Mathematics, University of Bonn
First Advisor: Prof. Dr. Juan J. L. Vélazquez
Thesis: On the Spectral Theorem for bounded and unbounded operators
Defence date: 03/06/2020
- **Advisor for Master Thesis.**
Candidate: Simone Somnavilla, Institute for Applied Mathematics, University of Bonn

Thesis: On the asymptotic behaviour of the solutions of a linear Smoluchowski equation
Defence date: 21/06/2019

Projects and Grants

- From 2019 investigator of the **Research Area C1** (Mathematical modeling of matter and materials) of the **Cluster of Excellence: Hausdorff Center for Mathematics**, Bonn, Germany.
<https://www.hcm.uni-bonn.de/research-areas/#c13643>
- From 2016 member of the **Collaborative Research Centre 1060** (SFB 1060): The Mathematics of Emergent Effects, project B5. Funded by the German Research Foundation (DFG).

Organization of Scientific Events

- 05-10/09/2022 **Trials in wave turbulence: from random waves to kinetic equations (*Summer school*)**, Gran Sasso Science Institute (GSSI), L'Aquila. Organizers: Paolo Antonelli, Serena Cenatiempo, Riccardo Montalto, Alessia Nota, Raffaele Scandone.
- 06/2021 – **Stochastic Modeling in Physics, Biology and Population Dynamics (SMAQ Seminars)**, Gran Sasso Science Institute (GSSI) and University of L'Aquila. Organizers: Serena Cenatiempo, Alessia Nota.
- 11-14/12/2019 **Kinetic Modeling: Analysis and Applications (*Three Minisymposia*)**, SIAM Conference on Analysis of Partial Differential Equations (PD19), La Quinta, California.
Organizers: Irene M. Gamba, Alessia Nota, Maja Taskovic
- 10 -14/06/2019 **Derivation of effective equations: classical and quantum (*Workshop*)**, Hausdorff Research Institute for Mathematics, Bonn.
Organizers: Roberta Bianchini, Serena Cenatiempo, Lingbing He, Alessia Nota, Chiara Saffirio, Sergio Simonella, Raphael Winter
<https://www.him.uni-bonn.de/programs/future-programs/future-junior-trimester-programs/kinetic-theory-2019/workshop-effective-equations-frontiers-in-classical-and-quantum-systems-june-24-28-2019/>
- 20 - 24/05/2019 **Trails in kinetic theory: foundational aspects and numerical methods (*Summer school*)**, Hausdorff Research Institute for Mathematics, Bonn.
Organizers: Giacomo Albi, Sara Merino-Aceituno, Alessia Nota, Mattia Zanella
<https://www.him.uni-bonn.de/programs/future-programs/future-junior-trimester-programs/kinetic-theory-2019/summer-school/>
- 03 - 09/03/2019 **Lorentz Gas Dynamics: particle systems and scaling limits (*Mini-Workshop*)**, Mathematisches Forschungsinstitut Oberwolfach.
Organizers: Alessia Nota, Chiara Saffirio, Juan J.L. Velázquez
https://www.mfo.de/occasion/1910b/www_view
- 24 - 26/09/2018 **Young Women in Mathematical Physics (*Workshop*)**, Hausdorff Center for Mathematics, Bonn.
Organizers: Alessia Nota, Elena Pulvirenti
<https://www.iam.uni-bonn.de/ywmp>

Approved Research Projects

Collaborative Research Centre 1060 (SFB 1060) **The Mathematics of Emergent Effects**, Project A02 “Classical and quantum kinetic equations” (Co- Principal Investigator) for the period 2021-2024, based at University of Bonn.

Fundings: 296.400 EUR

Declined due to change of Institution (September 2020)

Scientific Responsibilities

Institutional Responsibilities:

- 12/2021–02/2022: Review Committee member for the evaluation of the Collaborative Research Centre (CRC) 1481- "Sparsity and Singular Structures" based at RWTH Aachen University (Germany) funded by the German Research Foundation, DFG.
- 07–08/2021: External evaluator (in charge of a comparative report) for the hiring committee for 2 Assistant Professors (W1 Professorships) in Applied Mathematics at the “Excellence cluster of mathematics”, University of Münster (Germany).
- May-August 2019: *Group leader* at Hausdorff Junior Trimester Program “Kinetic Theory”.
- February 2019: Selected as *Early career Researchers’ representative* in the *Excellence Strategy Evaluation* for the University of Bonn (Excellence Strategy of the German Federal and State Governments to Promote Science and Research at German Universities)

Referee Activity:

Referee for AMS, Annals of Applied Probability, Archive for Rational Mechanics and Analysis, Kinetic and Related Models, Computers and Mathematics with Applications, Comptes-rendus de Physique de l’Académie des Sciences (CRAS), Journal of Functional Analysis, Journal of Statistical Physics, SEMA SIMAI Springer Series.

Professional Affiliations

Member of “International Association of Mathematical Physics” (IAMP).

Member of “Unione Matematica Italiana” (UMI). Member of “Società Italiana di Matematica Applicata e Industriale” (SIMAI)

Scientific Transfer (Broad Audience)

Talks

- 06/01/2021 **Donne e Scienza**, *Approfondimento per lo spettacolo teatrale “ALT - Le donne scienziato della tavola di Mendeleev”*, Roma.
- 12/01/2019 **Fisica: Isaac Newton**, “*Giornate di studio: la Fisica*”, via Roma Libera, 23, Roma.
- 06/11/2015 **Materia energia pensiero: tra fisica e teoria della nascita**, *Aula Magna*, Sapienza, Università di Roma.
- 21/11/2015 **Luce, Gravità e Musica**, *Conferenza in occasione del centenario della Relatività Generale*, Biblioteca Vaccheria Nardi, Roma.

Contributed papers for broad audience

1. **Energia**

Alessia Nota

Sec. **Materia, energia, pensiero: fisica e teoria della nascita**

in *Atti Convegni all'Aula Magna Università di Roma*.

L'Asino d'oro edizioni (2016). ISBN: 978-88-6443-372-1