

Romeo Mensah | Curriculum Vitae

Contact Information

Address: Imperial College London

South Kensington Campus
Huxley Building, England

Email: ✉ p.mensah@imperial.ac.uk

Webpage: 🏠 homepage

Google Scholar: <https://scholar.google.co.uk>

Mathscinet: <https://mathscinet.ams.org/1236580>

ResearchGate: https://www.researchgate.net/profile/Romeo_Mensah

Orcid-id: <http://orcid.org/0000-0003-4086-2708>



Personal details

Birth Date: April 1988.

Civil Status: Single.

Nationality: Ghanaian.

English, Guan, Twi : **Mothertongues**
Fante, Ga : **Intermediate**
German, Italian : **(Very) Basic**

Employment history

Imperial College London, England-UK: Postdoctoral research.

10.2020–currently

Gran Sasso Science Institute, Italy: Postdoctoral research.

01.2019–09.2020

University of Ghana, Ghana: Full-time teaching assistant.

08.2010–05.2012

James Quagraine & Co, Ghana: Intern.

05.2009–07.2009

Tertiary education

Heriot-Watt University, Scotland-UK.

Thesis: 'Singular limits of stochastic compressible flows.' (shortened title).

09.2015–06.2019

Doctor of Philosophy (Successful defence 10.2018, Graduation 06.2019).

Rheinische Friedrich-Wilhelms-Universität Bonn, Germany.

Thesis: 'Ordinary Differential Equations Arising in Coating Flow Problems.'

10.2013–09.2015

Master of Science.

African Institute for Mathematical Science-AIMS, Ghana.

Thesis: 'Image Encryption and Decryption.'

08.2012–07.2013

Master of Mathematical Sciences.

University of Ghana.

Thesis: 'Spectral Theorem of Linear Operators in Hilbert Spaces.'

08.2006–07.2010

Bachelor of Arts in Mathematics with Economics.

Further Academic Degrees & Certifications

Master of Science in Mathematical Sciences : University of Cape Coast.

Joint degree awarded on completion of Masters study at AIMS-Ghana.

09.2013

Cryptography I : Online Course Statement of Accomplishment.

Course provided by Stanford University through COURSERA INC.

01.2013

Professional associations

Edinburgh Mathematical Society (EMS)

2015–now

Istituto Nazionale di Alta Matematica "Francesco Severi" (INdAM) - [GNAMPA]

2020–now

Teaching assistantships

F17XA1 : Mathematics for Engineers and Scientists 1 – Heriot-Watt, U.K.	Sep – Dec 2017
F18XC1 : Mathematics for Engineers and Scientists 3 – Heriot-Watt, U.K.	Sep – Dec 2017
F19NB-S2 : Numerical Analysis B – Heriot-Watt, U.K.	Jan – May 2016
F10MP-S2 : Partial Differential Equations – Heriot-Watt, U.K.	Jan – May 2016
MATH 226 : Introductory Computational Mathematics – Legon, Ghana.	Jan – May 2012
MATH 223 : Calculus II – Legon, Ghana.	Jan – May 2012
MATH 221 : Algebra – Legon, Ghana.	Aug – Dec 2011
MATH 123 : Vectors and Geometry – Legon, Ghana.	Aug – Dec 2011
MATH 121 : Algebra and Trigonometry – Legon, Ghana.	Jan – May 2011
MATH 222 : Vector Mechanics – Legon, Ghana.	Jan – May 2011
MATH 124 : Mechanics – Legon, Ghana.	Aug – Dec 2010
MATH 122 : Calculus I – Legon, Ghana.	Aug – Dec 2010

Invited talks

at Maxwell Institute, Edinburgh

Title: *'Polymeric fluid analysis.'* May 2020
Event: Virtual Maxwell Analysis seminar

at Gran Sasso Science Institute (GSSI), L'Aquila

Title: *'Singular limits of the compressible Navier-Stokes system with random forces.'* Nov 2019
Event: Russian seminar series

at Centre International de Rencontres Mathématiques (CIRM), Luminy

Title: *'Scale interactions in stochastic fluid models.'* May 2018
Event: Stochastic Partial Differential Equations

at Universität Bielefeld

Title: *'Scale interactions in stochastic fluid models.'* April 2018
Event: Stochastic analysis seminar

at Heriot-Watt University, Edinburgh

Title: *'The Incompressible limit of the Compressible Navier-Stokes equation.'* Oct 2017
Event: Evolution equations and friends

at International Center for Mathematical Sciences (ICMS), Edinburgh

Title: *'Stochastic compressible fluids and some of its scaling limits.'* Sep 2017
Event: MIGSAA multiscale problems in nonlinear PDEs

at International Center for Mathematical Sciences (ICMS), Edinburgh

Title: *'Stochastic compressible fluids and some of its scaling limits.'* April 2017
Event: 2017 Joint center of doctoral training (CDT) colloquium

Other presentations

Comparing fluid models using singular limits – Imperial College London.	Dec 2020
Scale interactions in stochastic fluid models – Heriot-Watt university.	Mar 2018
Maxwell Inst. PhD talk 'Singular limits of stochastic compressible flows' – University of Edinburgh.	April 2017
Weak-type (1,1) bounds for oscillatory singular integrals with rational phases – Universität Bonn.	May 2014
Basics of BV functions – Universität Bonn .	May 2014
Graduate seminar on probability theory: 'Self-avoiding walks' – Universität Bonn.	April 2014
Graduate seminar on PDEs: 'Boltzmann equation' – Universität Bonn.	April 2014
The Borromean rings – AIMS Ghana.	Jan 2012
The RSA scheme and cryptology simplified – University of Ghana.	April 2011
Spectral theorem of linear operators on Hilbert spaces – University of Ghana.	July 2010

Conferences and workshops attended

MPE Wednesday Series: STUOD & MPE CDT (virtual event) – London-UK.	<i>Dec 2020</i>
Black heroes of mathematics (virtual event) – ICMS, Edinburgh-UK.	<i>Oct 2020</i>
Winter School: Turbulence in fluids and PDEs – Lausanne-Switzerland.	<i>Jan 2020</i>
Modeling and analysis of evolutionary problems in materials science – Bonn-Germany.	<i>Sep 2019</i>
PDEs in Fluid Mechanics – Cantabria-Spain.	<i>Sep 2019</i>
Paths between Probability, PDEs, and Physics – London-UK.	<i>July 2019</i>
Workshop on fluid-structure interaction – Milano-Italy.	<i>Mar 2019</i>
Maxwell Institute Seminar with Stefania Lisai and Beatrice Pelloni – ICMS, Edinburgh-UK.	<i>Sep 2018</i>
Nonlinear analysis and the physical and biological sciences – ICMS, Edinburgh-UK.	<i>May 2018</i>
Stochastic Partial Differential Equations – CIRM, Luminy-France.	<i>May 2018</i>
A MIGSAA short course: Introduction to Regularity Structures – JCMB, Edinburgh-UK.	<i>May 2018</i>
A MIGSAA short course in Nonlinear Analysis by John Ball – ICMS, Edinburgh-UK.	<i>April 2018</i>
Mathematical analysis of incompressible fluid flows – Brighton-UK.	<i>Sep 2017</i>
MIGSAA multiscale problems in nonlinear PDEs – ICMS, Edinburgh-UK.	<i>Sep 2017</i>
Equadiff 2017 – Bratislava-Slovakia.	<i>July 2017</i>
Harmonic analysis and its interactions (in honour of Tony Carbery) – Edinburgh-UK.	<i>July 2017</i>
School in analysis and PDE – Warwick-UK.	<i>June 2017</i>
Probabilistic perspectives in nonlinear PDEs – ICMS, Edinburgh-UK.	<i>June 2017</i>
Joint CDT colloquium – ICMS, Edinburgh-UK.	<i>April 2017</i>
SPDE and related fields (in honor of Michael Röckner) – Bielefeld-Germany.	<i>Oct 2016</i>
MIGSAA fluid mechanics summer school – ICMS, Edinburgh-UK.	<i>Sep 2016</i>
CIME-EMS Summer school in applied mathematics: Singular random dynamics – Cetraro-Italy.	<i>Aug 2016</i>
Graduate course : stochastic pathwise integration and stochastic particle systems – Edinburgh-UK.	<i>April 2016</i>
Maxwell mini-symposium on analysis and its applications – ICMS, Edinburgh-UK.	<i>April 2016</i>
Carleson theorems and Radon type behaviour – Universität Bonn-Germany.	<i>May 2014</i>

Awards, Bursaries & Fellowships

Research Associate of Stochastic Transport in Upper Ocean Dynamics	<i>2020–now</i>
Gran Sasso Science Institute Postdoctoral fellowship	<i>2019–2020</i>
James Watt Scholarship.	<i>2015–2018</i>
BIGS Two-Years Qualifying Scholarship.	<i>2013–2015</i>
CWRU Graduate Fellowship & Assistantship (declined).	<i>2013–2014</i>
AIMS Bursary.	<i>2012–2013</i>
NCR Excellence Award for the Best Graduating Student in Mathematics.	<i>2010–2011</i>

Grants

Travel and accommodation grant (Hausdorff Institute).	<i>Sep 2019</i>
Travel, accommodation and subsistence grant (Imperial college).	<i>July 2019</i>
Accommodation and subsistence grant (University of Sussex).	<i>Sep 2017</i>
Accommodation grant (University of Warwick).	<i>June 2017</i>
Accommodation and subsistence EMS grant (Fondazione CIME).	<i>Aug 2016</i>

Publications and preprints

8: Local well-posedness of the compressible FENE dumbbell model of Warner type.

Dominic Breit & Prince Romeo Mensah,
Nonlinearity [35 pages] (2021),
<https://iopscience.iop.org/article/10.1088/1361-6544/abbd82>;
<https://arxiv.org/abs/1911.02465>.

7: An incompressible polymer fluid interacting with a Koiter shell.

Dominic Breit & Prince Romeo Mensah,
Journal of Nonlinear Science [56 pages] (2021),
<https://link.springer.com/article/10.1007/s00332-021-09678-5>;
<https://arxiv.org/abs/2009.14160>.

6: The combined incompressible quasineutral limit of the stochastic Navier-Stokes-Poisson system.

Donatella Donatelli & Prince Romeo Mensah,
SIAM Journal on Mathematical Analysis [31 pages] (2020),
<https://epubs.siam.org/doi/10.1137/20M1338915>;
<https://arxiv.org/abs/2005.08825>.

5: Dissipative martingale solutions of the stochastically forced Navier-Stokes-Poisson system on domains without boundaries.

Donatella Donatelli & Pierangelo Marcati & Prince Romeo Mensah,
Nonlinear Analysis: Real World Applications 57, 103201 [52 pages] (2020),
<https://doi.org/10.1016/j.nonrwa.2020.103201>;
<https://arxiv.org/abs/2005.00291>.

4: A multi-scale limit of a randomly forced rotating 3-D compressible fluid.

Prince Romeo Mensah,
Journal of Mathematical Fluid Mechanics [33 pages] (2020),
<https://doi.org/10.1007/s00021-020-00496-5>;
<https://arxiv.org/abs/1801.09649>.

3: Space-time approximation of parabolic systems with variable growth.

Dominic Breit & Prince Romeo Mensah,
IMA Journal of Numerical Analysis [48 pages] (2020),
<https://doi.org/10.1093/imanum/drz039>;
<https://arxiv.org/abs/1804.06097>.

2: Stochastic compressible Euler equations and inviscid limits.

Dominic Breit & Prince Romeo Mensah,
Nonlinear Analysis 184, 218-238 [21 pages] (2019),
<http://doi.org/10.1016/j.na.2019.02.013>;
<https://arxiv.org/abs/1802.07186>.

1: Existence of martingale solutions and the incompressible limit for stochastic compressible flows on the whole space.

Prince Romeo Mensah,
Annali di Matematica Pura ed Applicata (1923 -) 196, 2105-2133 [29 pages] (2017),
<http://dx.doi.org/10.1007/s10231-017-0656-1>;
<https://arxiv.org/abs/1612.03344>.

Peer reviews

- Mathematical Reviews (3)
- Zeitschrift für angewandte Mathematik und Physik (1)
- Zentralblatt MATH (5)

References

Dr. Dominic Breit,
School of Mathematical & Computer Science,
Colin McLaurin Building,
Heriot-Watt University,
Edinburgh EH14 4AS, UK,
Email: d.breit@hw.ac.uk,
Tel: +44 (0)131 451 3972.

Prof. Donatella Donatelli,
Dipartimento di Ingegneria
e Scienze dell'Informazione e Matematica,
Università degli Studi dell'Aquila,
67100 L'Aquila, Italy,
Email: donatella.donatelli@univaq.it,
Tel: +39 (0)862 433 161.

Prof. Bernd Schroers,
School of Mathematical & Computer Science,
Colin McLaurin Building,
Heriot-Watt University,
Edinburgh EH14 4AS, UK,
Email: b.j.schroers@hw.ac.uk,
Tel: +44 (0)131 451 8247.

Prof. Dr. Juan Velázquez,
Institute for Applied Mathematics,
Universität Bonn,
Endenicher Allee 60,
53115 Bonn, Germany,
Email: velazquez@iam.uni-bonn.de,
Tel: +49 228 73 62378.