**Mentoring African Research in Mathematics (MARM)**

**Application Form**

**Application Procedure**

Please give us the following information. Please use the headings below in your answers, and make sure that your answers take no more than two sides of A4 in total.

**It is important that you read the notes for guidance (overleaf) before you start.**

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| --- |
| 1. Your name, address, telephone number(s), email address and web site. |
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| 2. A description of your research interests, in no more than 200 words. |
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| 3. References to five of your recent publications. |
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| 4. Existing or recent contacts in Africa, any visits you have made, and any other relevant experience. |
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| 5. Which of the five types of mentoring activity (see notes for guidance below) you would most like to take part in. |
|  |
| 6. The African Department that you request to be partnered with (see list of departments below). |
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| 7. For applicants with an existing source of funding who are **not** applying for a grant: please state a) the source of the funding; b) the level of the funding. |
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***Note****: Data you provide will be stored and processed on, and transferred between, computer systems of the sponsoring organisations. A statement of the London Mathematical Society’s data protection registration is available from the Society (ref: DP/PRC).*

**Notes for Guidance**

The London Mathematical Society (LMS) and the International Mathematical Union (IMU) in association with the African Mathematics Millennium Science Initiative (AMMSI) are seeking applications for grants to support mathematics and its teaching in universities in Africa. Four mentoring partnerships are to be awarded. These will be for a duration of one year, with the possibility of extension for a further year.

The project is designed to counter the mathematics ‘brain-drain’ by supporting qualified mathematics professionals in situ. Continuing professional links to a centre in the developed world, professional mentoring and opportunity for periodic research travel will contribute to the possibility and relative attractiveness of contributing one’s mathematical expertise at home rather than moving permanently to the developed world.

The MARM awards will focus on building infrastructure and networking in mathematics in Africa. They offer postgraduate scholarships, visiting lectureships and conference support for the benefit of advanced students and young researchers in the mathematical sciences.

The MARM programme will support mentoring relationships between mathematicians in countries with a strong mathematical infrastructure and their African colleagues, together with their students. Its sharpest focus is on cultivating longer-term mentoring relations between individual mathematicians and students.

A typical mentoring relationship will be a combination of two or more of the following activities:

1. co-supervision of an African student registered for a higher degree in an African university;
2. mentoring a research group, including its research students and post-doctoral researchers;
3. research collaboration;
4. giving an advanced short course in an African university, perhaps as part of a workshop;
5. helping to improve graduate education in mathematics in the longer term.

Applicants may be interested in contributing to all of these activities, they may prefer to concentrate on one or two, or indeed they may have other suggestions for types of mentoring activity in which they could take part.

**Prospective mentors are required to consider the attached list of African Institutions and proposed collaboration areas and to indicate which Institution they would like to collaborate with.**

*Application forms should be sent to: Katherine Wright, Society and Research Officer* [*marm@lms.ac.uk*](mailto:marm@lms.ac.uk)

***The deadline for the receipt of applications is Friday 20 December 2019.***

30 October 2019

**AFRICAN DEPARTMENTS**

| **Ref** | **INSTITUTION** | **COUNTRY** | **POSTGRADUATE PROGRAMMES** | **CONTACT PERSON(S)** | **COLLABORATION AREAS** |
| --- | --- | --- | --- | --- | --- |
|  | **Universite Gaston Berger**  Section de Mathematiques Appliquees, UFR | Senegal | M.Sc/PhD: Financial Mathematics, Algebra and Geometry, Scientific Calculus, Stochastic Calculus, Dynamical Systems, Number Theory and Cryptography, Data Sciences, mathematical and statistical modeling (150) | Mariama Ndiaye DIAKHABY <mariama-ndiaye.diakhaby@ugb.edu.sn> | Differential Geometry, Algebraic Geometry, Dynamical System, Financial Mathematics Cryptography and Number Theory |
|  | **University of Bejaia**  Laboratory of Applied Mathematics , Faculty of Exact sciences, | Algeria | MSc: PDEs and Dynamical Systems, Statistics and Probability Theory | Rezki Chemlal <rchemlal@gmail.com> | Dynamical Systems, Stochastic PDEs |
|  | **University of Namibia** Department of Mathematics | Namibia | PhD : Pure Mathematics (2), Financial Mathematics (2), Applied Mathematics (1) MSc: Applied Mathematics (3), Pure Mathematics (2). | DR MARTIN MUGOCHI <mmugochi@unam.na> | 1) Mathematical modelling (applied to Epidemiology, Climate modelling, Water distribution); Pure Mathematics (Algebra, Algebraic Geometry, Category Theory, Topology); Constructive Mathematics and Formal Systems with Applications to Computer Science. |
|  | **Adama Science and Technology University**  Department of Applied Mathematics, School of Applied Natural Science | Ethiopia | MSc: Mathematical Modelling (8), Numerical Analysis (6), Differential Equations (6) PhD: Mathematical Modelling (8), Fluid Dynamics (6), Numerical Analysis (5), Optimization (4), Combinatorics (2), Differential Equations (5) | Dr. Legesse Lemecha Obsu <legesse.lemecha@astu.edu.et>; <oblegd@gmail.com> | Computational Fluid Dynamics, Mathematical Biology, Differential Equations, Numerical Analysis, Optimal Control |
|  | **University of Port Harcourt**  Department of Mathematics and Statistics, Faculty of Science | Nigeria | MSc/PhD: Applied Mathematics (4)' Biostatistics/BiometrY(5), Econometrics/Operations Research (4) | (1) Prof.E C. Nduka <ethelbert.nduka@uniport.edu.ng>; (2) Dr. U.P.Ogoke <uchenna.ogoke@uniport.edu.ng> | Biostatistics, Biometrics, Statistical Data Analysis |
|  | **University of Dschang** Department of Mathematics and Computer Science Faculty of Science | Cameroon | MSc: Algebra (15), Analysis and Applications (61), Algebra and Algebraic Topology (12) PhD (46) | : Jean Louis WOUKENG FEUDJIO <jwoukeng@gmail.com>; <jean-louis.woukeng@univ-dschang.org> | Financial and Actuarial Mathematics |
|  | **University of Zambia** Department of Mathematics and Statistics | Zambia | MSc: Mathematics (9), Statistics (8); PhD (1) | Dr. Victor Mooto Nawa <mnawa@unza.zm>; <vnawa@yahoo.com> Dr. Mervis Kikonko <mervis.kikonko@unza.zm>; <mervis.kikonko@gmail.com> | Algebra, Operator Theory, Functional Analysis, Metric Spaces, Mathematical Statistics, Epidemiology, Actuarial Science, Financial Mathematics |
|  | **Mbarara University of Science and Technology** Department of Mathematics | Uganda | MSc: Pure Mathematics (6), Applied Mathematics (7) PhD: Pure Mathematics (2), Applied Mathematics (2) | Prof. Julius Tumwiine <jtumwiine@must.ac.ug>; <tumwiineh@yahoo.com> | Mathematical modelling and Mathematical statistics |
|  | **University of Douala** Laboratory of Mathematics – Post Graduate Training Unit for Mathematics, Applied Computer Sciences and Pure Physics- Post Graduate School for Pure and Applied Sciences - Faculty of Sciences | Cameroon | Ph.D: Algebra, Analysis and GeometrY(2), Mathematical Modelling in Social Science (6), Epidemiology (6) MSc: Algebra Analysis and Geometry (4), Epidemiology (4), Mathematical Modelling in Social Science (3), Mathematical Modelling in Engineering (3) | Prof Dr Louis Aimé FONO <lfono2000@yahoo.fr>; Dr Ngakeu Ferdinand <fngakeu@yahoo.fr> | a) In Financial Mathematics and Mathematics for Actuarial Science, b) In Geometry and, c) In Nonlinear Analysis Methods and Partial Differential Equations arising from Physics and Engineering. |
|  | **Jaramogi Oginga Odinga University of Science and Technology** School of Mathematics and Actuarial Science | Kenya | MSc: Pure Mathematics (10), Applied Mathematics (8), Applied Statistics (4) PhD: Pure Mathematics (8), Applied Mathematics (5), Applied Statistics (2) | Dr. Benard Okelo <bnyaare@yahoo.com>; Prof. Michael Oduor <oduorokoya2005@gmail.com> | Functional Analysis |
|  | **Universite Felix Houphouet Boigny (UFHB)** UFR Mathematiques et Informatique | Ivory Coast | Probability and Statistics (39), Computer Engineering(4), Database and Software Engineering (40), Partial Differential Equations Optmization and Numerical Analysis (23), Fundamental Mathematics (36), MIAGE (66), Computer Networks and Telecommunications (10), Mechanics (2) | Yao Koffi Modeste <Modeste.nzi@univ-fhb.edu.ci>; <modestenzi@yahoo.fr> | Statistics applied to Life Sciences, Probability |
|  | **Federal University of Technology, Akure (FUTA)** Department of of Mathematical Sciences | Nigeria | M. Tech (5), PhD in Mathematics (10) | Dr. Tunde Tajudeen Yusuf <ttyusuf@futa.edu.ng> | Mathematical Modelling with emphasis on Industrial and Epidemiological problems |
|  | **Abdou Moumouni University**  Department of Mathematics and Computer Sciences, Faculty of Sciences and Technology | Niger | MSc (15); PhD (10) | Prof. Hassirou Mouhamadou <mouhamadouhassirou@gmail.com> | Algebraic Geometry, Differential Geometry, Numerical Analysis, Statistics and Probability, Algebra, Discrete Mathematics, Artificial Intelligence, Data Mining |
|  | **University of Dar es Salaam** Department of Mathematics | Tanzania | MSc: Mathematics (10), Mathematical Modelling (15) PhD (Mathematics (15) | Prof. Eunice W. Mureithi <Mureithi.eunice@udsm.ac.tz>; <ewambui02@gmail.com> | Functional Analysis, Algebra, Mathematical Epidemiology, Fluid Dynamics, Numerical Solution of Differential Equations, Operations Research |
|  | **Masinde Muliro University of Science and Technology** Depertment of Mathematics | Kenya | MSc: Pure Mathematics (14), Applied Mathematics (18), Statistics (20) PhD: Pure Mathematics (10), Applied Mathematics (15), Statistics (6) | Dr. Joyce K. Nthiiri <jnthiiri@mmust.ac.ke> | Mathematical Biology, Algebra, Data Assimilation and Machine Learning |
|  | **University of Kinshasa**  Regional Center of Doctoral training in Mathematics and Computer Science, Faculty of Sciences | D. R. Congo | Pure Mathematcs in Algebra, Differential Geometry and Differential Equations (1 MSc and 5 PhD); Aplied Mathematics in Biomathematics, Biostatistics, Finance and Actuarial Science, Operations Research (35 MSc and 10 PhD). | Prof. Alain MUSESA LANDA <musesalanda@gmail.com>; Prof. Rebecca WALO OMANA <Rebecca.walo@unikin.ac.cd> | Mathematics of Finance; Biomathematics, Dynamical Systems, Cryptology, Differential Geometry |
|  | **University of Ghana, Legon** Department of Mathematics, School of Physical and Mathematical Sciences, College of Basic and Applied Sciences | Ghana | MPhil (Mathematics) - 10 students PhD (Mathematics) - 7 students | Dr. Sehba Benoit <bfsehba@ug.edu.gh>; <bsehba@gmail.com> | Algebraic Topology, Mathematical Biology, Abstract Algebra, Combinatorial Graph Theory |
|  | **Kenyatta University**  Department of Mathematics and Actuarial Science, | Kenya | Fluid dynamics, Nanotechnology, Mathematical modelling of diseases, climate change, Coding, cryptography. | Dr. Winifred Mutuku <mutuku.winifred@ku.ac.ke>; <mutukuwinnie@gmail.com> | Mathematical Modelling of Diseases, Fluid Mechanics |
|  | **University of Agriculture, Makurdi** Department of Mathematics, Statistics and Computer Science | Nigeria | M.Sc: Mathematics (15), Indusrial Mathematics (13) PhD Mathematics (6) | Dr. Jonathan A. Ikughur <atsua2004@yahoo.com>; Dr. Abolape D. Akwu <abolaopeyemi@yahoo.co.uk> | Combinatorics, Algebra (Topology,number theory), non-classical Algebra, Analysis (complex analysis, Functional Analysis), Fluid dynamics, Numerical Analysis |
|  | **University of Abomey-Calavi**  International Chair in Mathematical Physics and Applications (ICMPA-UNESCO Chair) | Benin | M.Sc. and PhD in Mathematical Physics of the Material Universe (12), Water and Environment Sciences (30), Geonformatics and its Applications for Integrated Management of Water Resources and Ecosystems in Africa (10), Statistics Applied to the Life Sciences (26), Physical Oceanography and its Applications (12). | Prof. M. N. Hounkonnou <norbert.hounkonnou@cipma.uac.bj>; <hounkonnou@yahoo.fr> | Integrable Hamiltonian systems, Differential Geometry, Mathematical Physics, Control Theory, Nonassociative algebras, Mathematical Statistics, Quantum Probability. |
|  | **Strathmore University** Strathmore Institute of Mathematical Sciences (SIMS) | Kenya | MSc: Mathematical Finance (3), Biomathematics (7), Statistical Science (9) PhD: Pure Mathematics (1), Applied Mathematics (2) | Dr. Mary A. Ochieng' <machieng@strathmore.edu> | Mathematical Finance |
|  | **Un​iversity of Johannesburg**  Department of Mathematics and Applied Mathematics​ | South Africa | BSc: Honours in Mathematics and Appluied Mathematics (25) MSc: Mathematics and Applied Mathematics (6) PhD: Mathematics and Applied Mathematics (8) | Prof Farai Nyabadza https://www.uj.ac.za/contact/Pages/Farai-Nyabadza.aspx | Mathematical Modelling of Infectious Diseases |
|  | **University of Rwanda** Department of Mathematics, School of Sciences, College of Sciences and Technology | Rwanda | MSc: Mathematical Modelling and Scientific Computing (3), Statistical Modelling and Actuarial Sciences (3) | Dr. Marcel Ndengo <serandengo@gmail.com> | Partial Differential Equations and their Applications, Stochastic Processes, optimization and Optimal Control, biomathematics |
|  | **Moi University**  Department of Mathematics, School of Biological and Physical Sciences | Kenya | MSc: Pure Mathematics (9), Applied Mathematics (11) PhD: Pure Mathematics (10), Applied Mathematics (14) | Dr. Fredrick Oluoch Nyamwala <foluoch@yahoo.com>; <foluoch2000@mu.ac.ke>; <nyamwalafredrick27@gmail.com> | Mathematical Analysis, Algebraic geometry, Group Theory |
|  | **University of KwaZulu-Natal**  School of Mathematics, Statistics and Computer Science, | South Africa | Mathematical Biology, Numerical Analysis, Optimisation and Optimal control theory, Theoretical Fluid Dynamics , | Dr Hermane Mambili-Mamboundou <Mambilimamboundou@ukzn.ac.za> | Mathematical Biology, Numerical Analysis, Optimisation and Optimal control theory |
|  | **University of Nairobi**  School of Mathematics, College of Biological and Physical Sciences | Kenya | MSc: Pure Mathematics (5), Applied Mathematics (14), Mathematical Statistics (12), Biostatistics (12), Social Statistics (42), Actuarial Science (25) PhD: Pure Mathematics, Applied Mathematics, Mathematical Statistics, Biostatistics, Social Statistics, Actuarial Scienc, Financial Mathematics (28) | Prof. Patrick Weke <pweke@uonbi.ac.ke>; Prof. Philip Ngare <pngare@uonbi.ac.ke>; Dr. Josephine Kagunda <jwndirangu@uonbi.ac.ke> | Mathematical Modelling, Partial differential Equations, Dynamical Systems, Algebra, Algebraic Geometry, Functional Analysis, Financial Mathematics, Biostatistics |
|  | **University of Dodoma** Department of Mathematics and Statistics, College of Natural and Mathematical Sciences | Tanzania | MSc: Mathematics (10), Statistics (15) (11) PhD: Mathematics (5), Statistics (5) | (1) Dr. Jefta Mvukaye Sunzu <jeftasunzu@udom.ac.tz>; <jefta@aims.ac.za> (2) Dr. Monica Gervas Kung'aro <kungaromonica@gmail.com> | Pure Mathematics (Topology, Differential Geometry, Algebra, Number Theory); Mathematical Modelling (Epidemiology, Ecology, Optimal Control Theory, Dynamical Systems); Mathematical Physics; Magnetohydrodynamics, Fluid Mechanics. |
|  | **Bahir Dar University**  Science College, Depertment of Mathematics | Ethiopia | MSc (150 students): Numerical Analysis, Differential Equations, Analysis, Algebra, Mathematical Modelling PhD (14 students): Appied Mathematics, Algebra, Mathmatics Education. | Dr. Tesfahun Berhane <tesfahunb@gmail.com> | Applied Mathematics: Financial Mathematics, Numerical Analysis, Optimization, Differential Equations. Algebra: Fuzzy and Lattice Theory |
|  | **Institute of Finance Management (IFM)**  Department of Computer Science and Mathematics; Faculty of Computing, Information Systems and Mathematics | Tanzania | MSc: Insurance and Actuarial Science (126), Information Technology and Management (38) | Dr. Faraja Igira <faraja.igira@ifm.ac.tz> | Operations Research, Mathematical modelling, Financial Mathematics, Actuarial mathematics, Big data analytics |
|  | **Maseno University**  Department of Pure and Applied Mathematics, School of Mathematics and Applied Statistics | Kenya | Operator Algebra, Number Theory, Combinatorics, Group Theory and Statistics related subjects | Dr. John Agure <johnagure@maseno.ac.ke> | *We are a young University though we have done some work in Analysis related areas, we think we are not in a position to preference in any area* |