



## MENTORING African Research in Mathematics (Marm)

Sponsorship opportunities for academic partnerships in Africa



# THE MARM Programme

The aim of the programme is to enable all mathematicians in Africa to pursue academic careers of the highest standard. Supporting the development of a vibrant mathematical community within and across Africa should provide a subsequent impact throughout the world of mathematics.

MARM links African academics with their UK and European counterparts via professional mentoring partnerships. In doing so, MARM provides the means and opportunities for African mathematicians to develop international working relationships while also improving the quality of academic provision within their home institutions.

It is believed that enhancing and developing academic research and research institutions in Africa will help ensure that pursuing world-class mathematical careers within Africa will be both achievable and a more attractive option than moving permanently. Over time, the strengthening of the mathematical community across Africa will benefit not only the African community itself, but worldwide mathematics as a whole.



# THE MARM Partnerships

23 partnerships have been awarded to date in: Cameroon, Ethiopia, Ghana, Ivory Coast, Kenya, Malawi, Morocco, Namibia, Nigeria, Republic of the Congo, Rwanda, Senegal, South Africa, Tanzania and Uganda. Each partnership has collaboratively defined its own objectives and priorities specific to the needs of the African institution and its own targeted methods of accomplishing these.

Activities undertaken have included:

- + Exchange visits
- Lectures, seminars and workshop series at African institutions
- + Joint PhD supervision
- Improvements in library and IT resources at African institutions
- Support for conference attendance (in Africa and internationally)
- Consultancy and advice on developing postgraduate programmes
- Mentoring and support for African postgraduate students with respect to wider academic and life skills
- Mentoring African early career staff in research and other skills
- Working with African university administrators to improve recruitment
- + Improving African departmental structuring
- Working with African institutions to ensure the maintenance of resources for mathematics departments
- Developing of research contacts and networking



# MARM IN AFRICA

### ROUND 1 PARTNERSHIPS

- Kwame Nkrumah University of Science and Technology, Ghana
   Partnered with
- University of Leicester, UK
- 2) University of Buea, Cameroon
- Partnered with
- Heriot-Watt University, UK
- Addis Ababa University, Ethiopia Partnered with Brunel University, UK

### ROUND 2 PARTNERSHIPS

- Bahir Dar University,
- Ethiopia National University of Rwanda,
- Rwanda University of Ilorin, Nigeria
- All partnered with
- University of York, UK
- Makerere University, Uganda Partnered with
- 5 University of Bath, UK

Université de Cocody-Abidjan, Ivory Coast Partnered with Stockholm University, Sweden

Kenyatta University, Kenya Partnered with Sapienza – Università di Roma, Italy

## ROUND 3 PARTNERSHIPS

- 8 University of Ghana, Ghana
  Partnered with
  8 University of Cambridge, UK
- University of Dar Es Salaam, Tanzania Partnered with

9 University of Bath, UK

Maseno University, Kenya

**Partnered with** University of Oxford, UK

University of Nairobi, Kenya Partnered with

University of Sussex, UK

### ROUND 4 PARTNERSHIPS

 University of Cape Town, South Africa
 Partnered with
 Athens University of Economics and Business, Greece

- Université Mohamed V-Agdal, Morocco Partnered with
- Newcastle University, UK
- University of Nairobi, Kenya Partnered with
  - University of Oxford, UK

Marien Ngouabi University, Congo
 Partnered with
 Université de Bordeaux, France

### ROUND 5 PARTNERSHIPS

- Moi University, Kenya
  Partnered with
  University of South Wales, Wales
- University of KwaZulu-Natal, South Africa Partnered with
- 7 University of Birmingham, UK
- University of Malawi, Malawi
  Partnered with
  Imperial College, London
- <sup>19</sup> University of Douala, Cameroon
  Partnered with
  <sup>19</sup> University of Malaga, Spain

### ROUND 6 PARTNERSHIPS

- 20 Université Gaston-Berger, Senegal Partnered with
  - University of Cambridge, UK
- 21 University of Namibia, Namibia Partnered with
- 1 Politecnico di Torino, Italy
- 22 Adama Science and Technology University, Ethiopia
  - Partnered with
- 22 Brunel University, UK

<sup>23</sup> Université Félix Houphouët-Boigny, Ivory Coast Partnered with

<sup>3</sup> University of Bristol, UK



## WHAT MARM Has achieved

From a relatively low-level investment, the outcomes of MARM have been substantial:

- Directly led to the leveraging of external funds into the National Institute of Mathematical Science at Kwame Nkrumah University of Science and Technology, Ghana
- Supported the Kenyatta University International Mathematics Conference series and the International Conference on Mathematics and its Applications, encouraging networking and attracting international speakers to the continent
- Development of the next generation of African mathematicians via supervision and support for postgraduate students
- Lasting improvements to a number of higher education facilities
- Fundamental institutional improvements including improved and enhanced academic curricula and departmental organisation and resourcing
- + Joint publications by European and African Researchers



## HOW CAN YOU Be involved?

The LMS wants to build upon the extensive work and successes already achieved by the MARM programme. We are looking for new sponsorship to both continue and expand the mentoring partnerships. With more funds we can increase the grants available to partnerships and extend the length, thus enabling the partnerships to develop further and more deeply.

With available funding there are other opportunities that we would welcome the opportunity to explore such as:

- Web-based learning and its implications at both undergraduate and postgraduate level
- Masters level education including courses, teaching and student mentoring – and its contributions to the academic pipeline in Africa
- Postgraduate scholarships in Africa to support academic needs from postgraduate education to conference attendance
- International conference series in Africa developing the foundations already laid and taking these to world class level

We would welcome further discussion on how best the programme can be developed and funding maximised.

www.lms.ac.uk/mentoring-african-research-mathematics-marm





## MARM PARTNERS

#### ROUND 1

Dr Frank Neumann, University of Leicester and Professor Isaac K. Dontwi, Kwame Nkrumah University of Science and Technology

Professor Sergey Mikhailov, Brunel University and Dr Tsegaye Gedif Ayele, Addis Ababa University

Professor Sergey Foss, Heriot-Watt University and Professor Gideon A. Ngwa, University of Buea

#### ROUND 2

Professor Sanju Velani, University of York and Professor Verdiana Masanja, National University of Rwanda

Professor Gregory Sankaran, University of Bath and Dr Juma Kasozi, Makarere University

**Professor Nigel Cutland**, University of York and **Dr Habtu Zegeye**, Bahir Dar University

Dr Brent Everitt, University of York and Professor Mathias Bamigbola, University of Ilorin

Professor Enrico Rogora, Sapienza – Università di Roma and Dr David M. Malonza and

Professor Leo Odongo, Kenyatta University

Professor Mikael Passare, Stockholm University and Professor Modeste N'Zi, Université de Cocody-Abidjan

### ROUND 3

Dr Maciej Dunajski, University of Cambridge and Dr Margaret McIntyre, University of Ghana

Dr Balazs Szendroi, University of Oxford and Dr David Stern, Maseno University

Dr Anotida Madzavamuse, University of Sussex and Professor Richard Simwa and Dr James Nkubi Katende, University of Nairobi

Dr Ben Adams, University of Bath and Professor E.S. Massawe, University of Dar es Salaam

### ROUND 4

Dr Panagiotis Besbeas, Athens University of Economics and Business and

Dr Res Altwegg, University of Cape Town

Professor Michael Dritschel, Newcastle University and Professor Omar El Fallah and Professor Nouzha El Yacoubi, Université Mohammed V-Agdal

**Dr Balazs Szendroi,** University of Oxford and **Dr Damian Maingi,** University of Nairobi

Professor Alain Yger, Université de Bordeaux and Professor Basile Bossoto, Marien Ngouabi University

#### ROUND 5

Dr Nick Gill, University of South Wales, and Dr Ian Short, The Open University, and Dr Fredrick Nyamwala Oluoch, Moi University

Professor Sergey Shpectorov and Dr Kay Maagard, University of Birmingham, and Professor Bernardo Rodrigues, University of KwaZulu-Natal

Dr Ambrus Pál, Imperial College, London, and Dr Patrick Ali, University of Malawi

Dr Benjamín Olea Andrades, University of Malaga, and Dr Ferdinand Ngakeu, University of Douala

#### ROUND 6

Professor Maciej Dunajski, University of Cambridge, and Professor Abdou Diongue, Université Gaston-Berger

Dr Letterio Gatto, Politecnico di Torino, and Dr Martin M. Mugochi, University of Namibia

Professor Sergey Mikhailov, Brunel University, and Dr Tamirat Temesgen, Adama S&T University

Dr Luca Giuggioli, University of Bristol, and Dr N'ZI Yao Koffi Modeste, Université Félix Houphouët-Boigny

The Mentoring African Research in Mathematics (MARM) programme has been running since 2006 with original funding from the Nuffield Foundation and the Leverhulme Trust.

The London Mathematical Society's current MARM programme is sponsored by the London Mathematical Society and the International Mathematical Union (IMU) in association with the African Mathematics Millennium Sciences Initiative (AMMSI).

The members of the MARM Board are: Chair: Frank Neumann (Leicester), Balazs Szendroi (Oxford), Mark Roberts (Surrey), Tanniemola Liverpool (Bristol), Anne-Sophie Kaloghiros (Brunel) and Anotida Madzvamuse (Sussex).

Please direct any questions on the MARM programme to MARM@lms.ac.uk