AIMS-NEI Business Plan

Testimonials

27 November 2008

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Current student, Faniry Harijaona Razafindrazaka, Madagascar

RAZAFINDRAZAKA Faniry Harijaona

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October 30, 2008

Studying at AIMS is the goal of every students in the department of mathematics in my country. From the first year until the fourth year, every students make some kind of competition to be appreciate by teachers for having good recommendations from them

Currently, passing the third year is quite difficult. But when I have heard that I passed it, my only ambition was to study at AIMS

Like someone from AIMS said: “AIMS changed my destiny”, I agree with him. Not only the lectures are interesting but also the possibility to use computer on our own interest help us so much

The idea of bringing together the students coming from a lot of countries is good. It help us to share our cultures and learn about the others way of living

I want to thank the director of this institute. Surely, I will bring something good from AIMS to develop my country and may be the rest of world

Source: Class interview

Current student, Simon P. Johnstone-Robertson, South Africa

Testimony About AIMS

Simon P. Johnstone-Robertson

October 30, 2008

Question 1

I first heard about AIMS while studying for a Physics Honours Degree at Nelson Mandela Metropolitan University in Port Elizabeth, when I received an e-mail advertising a week-long course entitled “Mathematical Modelling in Epidemiology” that AIMS was offering in June/July 2007. I decided to apply for this course simply out of interest and it was while attending it that I was informed about the postgraduate diploma that AIMS offers over nine months of the year. I subsequently decided to apply for the postgraduate diploma course and later found that I had been accepted for this course as well

Question 2

Due to the fact that I had been to AIMS before, I think I had a fairly good idea of what to expect in terms of the accommodation and the standard of the postgraduate diploma course offered. My expectations were to have comfortable accommodation as well as a high quality course lectured by excellent lecturers from all over the world, known in their respective fields. I am pleased to say that my expectations have been met so far and in fact they have been exceeded!

Question 3

The first noticeable difference is the fact that you are not treated as someone who is less educated than your lecturer (even though this is the case), but rather as a fellow researcher or academic. Another striking difference, linked with the first, is that you are encouraged to interact with the lecturers on a first name basis. I feel that this really encourages a student to build not only an academic relationship with each lecturer, as is the case in most universities, but rather a friendship as well, and this has the subsequent benefit of each student feeling free to approach the lecturer at any time to discuss any matter. It really provides a stimulating environment for learning

Question 4

There have been many special memories I have stored up just from the first two was the first time that they had swum in the ocean; a priceless experience to be a part of seeing their faces every time that a wave came!

Source: Class interview

Current student, Hussam Eldeen Babikir Ahmed Mohammed, Sudan

Hussam Eldeen Babikir Ahmed Mohammed

I graduated with B.Sc. (Honours) degree in Physics. I heard about AIMS from one of my friends who studied there before. At AIMS, the way of teaching is completely different from that at my university. There is a lot of assistance from the lecturers and tutors during the courses. My English language and computer skills have improved during the 3 months I have spent at AIMS. I know that AIMS will give me an opportunity to continue with my postgraduate studies

Source: E-mail interview

Current student, Henintsoa Onivola Minoarivelo, Madagascar

My testimony about AIMS

Henintsoa Onivola Minoarivelo

October 30, 2008

I first heard about AIMS from one of my lecturers in my previous university

In the mathematics department of this university, AIMS is known by almost everybody and has a very good reputation. When I heard that I was selected, I was very excited!

For me, being an AIMS student is a very big opportunity. AIMS promotes a brighter future for mathematical sciences throughout Africa. Living here at AIMS is a wonderful experience – high quality lectures, and I have made new friendships; Mathematics courses are especially focused on applied mathematics, which has been a little neglected at my previous university

So, I see AIMS giving me the possibility of brighter future

Source: E-mail interview

Current student, Geofrey Wingi, Tanzania

Testimony

October 30, 2008

My name is Geofrey. I come from Tanzania. I pursued Bachelor of Education in science specializing in Mathematics at the University of Dar es Salaam

I first heard about AIMS from one of the ex-AIMS student in 2005. I obtained more information from the AIMS coordinator in Tanzania, who by then was lecturing at the University of Dar es Salaam

My expectations of high standard of learning and advanced computer skills have in fact been met and I am really enjoying the place

There are many things here at AIMS which are different from my previous university. The method of teaching based on problem solving is one, team-work spirit among the lecturers, tutors and students is another. There is also a fully-equipped computer lab which caters for our 24 hours needs

I have a three months experience now of meeting lecturers from prestigious universities all world over

Source: E-mail interview

Current student, Friday Ifeanyi Michael, Nigeria

Testimonial

Friday Ifeanyi Michael (Nigeria)

The first time I heard about AIMS was in March 2005. I was in Nigeria then, studying mathematics at the University of Ibadan. I became interested immediately, hoping to be at AIMS after my undergraduate studies, which was eventually realised

At AIMS, I've been exposed to different courses, which form a solid foundation on which further postgraduate studies can be built, without shaking. That was my expectation before coming to be exposed to different areas of mathematics and its applications- and so far this has been accomplished

AIMS is endowed with a number of facilities – computers, a good library, etc., and in this way, it differs greatly from my previous university. In addition, the lectures-students-tutors relationship is particularly appealing to me. This was one thing we lacked in my previous university

The structure of the programmes at AIMS fits me perfectly, suits me properly, and meets my need particularly. For me, AIMS is indeed a place to be

Source: E-mail interview

Current student, Victor Feunou, Cameroon

AIMS

Victor – victor@aims.ac.za

October 30, 2008

I first heard about AIMS in January 2008. This happened through friends of mine who knew it before. At that moment, I was in the university of Yaoundel in Cameroon and I was doing my Honours in Mathematics

When I heard I was selected, I was so pleased and I had to work harder in order to meet the challenges at AIMS. Before arriving, I expected to meet a variety of other students. I also expected to meet students with the same interests and zeal for studies. So far, I've met everyone I wished and I'm pleased

The length of the courses and the relationship between the lecturers and students constitutes the main differences between AIMS and my previous university. Every course last for two weeks and it is very intense. The lecturers are willing to discuss with us, we eat together and visit places together. The classes are very interactive

Learning computing is my favourite experience here. I had little knowledge before coming, but now, I'm doing well. To improve our skills, we have access to computers and Internet for granted every time. We also have tutors to assist us

Source: E-mail interview

Current student, Brian Chilambwe, Zambia

Communication Skills

Brian Chilambwe

October 30, 2008

My name is Brian Chilambwe and I come from Zambia. I first heard of AIMS in 2005, during my third year at the University of Zambia (UNZA), from students who were ahead of us and had been selected to study at AIMS. I was studying Mathematics (B.Sc. Ed) at that time

The expectations I had of AIMS were of hardwork. My expectations have been met since we really need to work hard to keep up with the pace

AIMS is different from my previous university in terms of the mode of lecturing and learning. Students at AIMS are encouraged to work through the course material at their own pace as long as they get to know the material. This is contrary to my previous university where we generally study to pass the exams with little retention after that

There have been many nice experiences at AIMS in the last 3 months, but I feel the one that has impacted on me most is the different cultures of the students, lecturers and staffs. This has shown me that though we come from different countries we are still able to live and interact harmoniously, for as long as we respect each other's way of life, the differences in our cultures are very small indeed

Source: E-mail interview

Current student, Christine Ayawoa Sitsope Dagbovie, Togo

I heard about AIMS in November 2007 at my last university, the University of Lome. I was studying pure mathematics and specialising in numerical analysis and optimisation

I expected that we would have a lot of programming and mathematical problems. Now, I realise that there is also a lot of physics

Here, there are many tutors to help us at all times and we all have access to computers. Another advantage is that we live close to the lecturers, which break the boundaries between us. We are also acquiring a lot of new skills. Unfortunately, we usually only have two weeks to practise them. The annoying thing is that it is quite easy to forget them!

My best experience so far has been the skill 'mathematical problem solving' with Alan Beardon. It was very challenging and the way that lecturer taught us how to think has edified me a lot

Source: Class interview

Current student, Bayleyegn Yibeltal Negussie, Ethiopia

- First, I heard about AIMS from colleague and I browsed the internet to get information about it in 2007. I studied mathematics for my undergraduate programme and Differential Equations for my Graduate studies at Addis Ababa University in Ethiopia
- I didn't expect too much before I arrived. However, now I have noticed that there is a lot to be learnt. I am doing a range of applied courses covering topics such as mathematical problem solving , physical problem solving and software development using different computer language
- Every course is given in a problem solving approach that I have never experienced before. Basically, each course starts from a defined problem then computer simulation is used to solve it and then finally the general theory is developed
- So far, my most special memory at AIMS is of the Muizenberg Beach.I had never swum in the sea before. I shall never forget the day when I swim in the Atlantic Ocean at muizenberg Beach

Thank you
with best regards

Bayleyegn Yibeltal Negussie
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Source: Class interview

Current student, Asha S. Kalula, Tanzania

- It was during April 2007 that I first heard about AIMS . I was about to finish my bachelor degree. I heard from a fellow student and later from the department of mathematics at the university of Dar es Salaam
- Before AIMS, I studied a Bachelor of education in Science majoring in mathematics
- When I was selected, I was excited and felt privileged to get this opportunity to study outside my country, and meet different students from different places
- I expected to acquire more knowledge in mathematics, and hence develop my professional skills
- My expectation has been met, and I find that AIMS is doing even more than I expected. I have been exposed to programming courses such as Python. Also AIMS provide opportunities to proceed with studies at a masters
- Level by providing half-bursaries
- The difference between AIMS and my previous university is that at AIMS we are taught by different lecturers from different universities and we have tutors who assist us and are available almost all the time

Source: Class interview

Current students (1/2)

AIMS students, 2008–09

Source: AIMS

Current students (2/2)

AIMS students, 2008–09

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Source: AIMS

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AIMS alumnus/tutor, Yves, Cameroon

"I got to know about AIMS in 2003 from two friends of mine who where students from the first group at AIMS. I was then working as a high school teacher in a small village called Mouanko. I was also tutoring at the University of Douala about 75 km away from Mounako and I had to travel once a very week. Thinks were not easy, I used to spend half a day waiting for a car and half a day travailing the 75 km separating me from Douala

AIMS was such a golden opportunity for me, it was either I got admitted there or my hardship will continue forever. Fortunately I was admitted at AIMS in 2004. Since then my life has tremendously changed, in less than 4 years, I successfully completed a Postgraduate Diploma, a Master Degree and a PhD Degree

Today I feel very blessed to have been at AIMS, I won the award for the best presentation in the category Doctoral Students at the 2007 edition of the South African Mathematical Society Congress. I have decided to dedicate some of my time for tutoring at AIMS and this is what I have been doing since January 2008

I am planning to undertake a postdoctoral study for two years starting next year, then I will look for a job either in my country or anywhere else in Africa"

Source: E-mail interview

AIMS alumna, Geomira, Tanzania

Now working at SACEMA

“Currently, I am doing disease modelling especially on TB at SACEMA in South Africa. I have two supervisors, Dr Farai Nyabadza and Dr Aziz Ouhinou

I would like to explain the main reason force me to work in this field. My county, Tanzania, is among 22 countries of high burden of tuberculosis (TB) incidence in the world. Not only TB but also Malaria and HIV are mainly causes of death in Tanzania and mostly, women and children

As a mother I would like to contribute on minimizing/ eradicating the epidemic of these disease. I would like to be in a position to model these diseases and use my findings to the public health policy

I thank you AMIS for open my mind by offering some courses on disease modeling”

Source: E-mail interview

AIMS alumnus, Bewketu Teshale, Ethiopia

Dear Marie,

Thank you for your email
I am from a small village called Agew Gimijabet. My families are working in government elementary school. I am the second for my family. After taking ESLCE (Ethiopian School Leaving Certificate Examination) I joined a university and then I graduated in BED from the Department of Mathematics, Haramya University, Ethiopia. I worked in the same university as a graduate assistant before coming to AIMS
The courses I took in AIMS helped me a lot in understanding the computational aspect of mathematics and also introduced me to the applied science. Though the three week modular courses were though and bulcky I have got a lot and enjoyed the courses. Another interesting about AIMS is 24/7 days internet access , this helps us to use the different package for mathematical computation. And also facilities at AIMS is all in one building, hence this created a good environment for study. AIMS is really an ideal place to study, you learn not only science but also different cultures
I am currently working my Msc in applied Mathematics specializing in Epidemiology with Dr Farai Nyabadza and Dr Rachid at SACEMA, Stellenbosch University, South Africa. It is really interesting to understand real physical phenomena by formulating models to it using different mathematical techniques. For my project I will be working on understanding the dynamics of Tuberculosis. Analysing the contribution of different causes of the disease transmission and also intervention mechanisms to reduce the prevalence of the disease in the society. When we consider in population level there are many questions to be asked what will be the dynamics of the disease in the future? what intervention mechanisms needed? in what proportion should be used to prevent the disease?
I am very happy in seeing that AIMS is spreading all over Africa. Africa needs science. No doubt that education is important for the well being of a society but I think what we lack is good education; the methodology as a whole and good facilities. A little contribution makes a difference so let's contribute little and make a difference
Finally if you want to reach all previous sts u can write to juststudents2003@aims.ac.za ,juststudents2004@aims.ac.za, juststudents2005@aims.ac.za, juststudents2006@aims.ac.za, juststudents2007@aims.ac.za

Kindest regards
Bewketu Teshale

Source: E-mail interview

AIMS alumnus, Dimbinirina Ramarimbahoaka, Madagascar

I did my undergraduate years of mathematics at the University if Antananarivo. I applied then to AIMS. I completed my AIMS postgraduate diploma in 2007 and then pursued my study by doing a Master degree in Mathematics of Finance at the University of Stellenbosch right after AIMS. I am currently doing an internship in an Insurance company in Madagascar while waiting to be graduated by Stellenbosch University

I definitely support the idea of building an AIMS Madagascar as I know that AIMS can help Madagascar to develop in the country the applications of mathematical sciences

I have gained so much knowledge and skills from AIMS and grateful for it. However, If I can not share what I have learned then my knowledge will not make a difference. Having an AIMS Madagascar in the country is the only possibility for me to share my skills and knowledge (for now). It gives me the chance to bring my help (by lecturing or tutoring) my fellow citizens. Moreover, Mathematics of Finance is not yet established at the University and need then to be taking into account as Madagascar will open soon a stock market in the country.

Madagascar has many students with high background in mathematics. As far as I am concerned, they need to be seen to make a difference in the world

Photo: with Professor Kopp

Source: E-mail interview

AIMS alumna, Theresia Marijani, Tanzania

I am Theresia Marijani. I was a student at AIMS in 2005/2006. I am studying my Masters at SACEMA at Stellenbosch University. My research area is modelling drug resistance in Malaria. I am supervised by Prof. Lungu who was the one of the AIMS lecturers in 2005

Before I came to AIMS, I did a degree of bachelor of Science majoring Mathematics and Statistics at the University of Dar es salaam, and I finished in June 2005

I am so proud to be an AIMS student because of the things that I learned at AIMS. The way of teaching at AIMS is totally different from my university so it helped me to be where I am today. Like the courses of Linux-programming, applied mathematics and physics. I came to know applied mathematics for example modelling diseases. I did not know that being a mathematician, I could be involved in solving problems of disease in society

Before AIMS, I had already given up my dream to study diseases like malaria after I realized my interest in mathematics exceeded that for Biology. But here I am now doing what I had always dreamed of doing. Thanks to AIMS

Source: E-mail interview

AIMS Alumna, Doreen Mbabazi, Uganda

I am Mbabazi Doreen. I was a student at AIMS in 2007/2008

Before coming to AIMS, I did a bachelor of Science degree majoring in Mathematics and minoring in Physics at the University of Makerere in Uganda

My time at AIMS was memorable. I loved the way of teaching, the group work and above all the dedication of all the parties involved

My look at life as a mathematician changed very much. I stopped seeing myself as someone to solve equations and prove theorems but also as one who would be able to work with reality

Currently, I am doing my masters at Stellenbosch University at SACEMA. My supervisor is Dr. Rachid. I am looking at exogenous reinfection in Tuberculosis

Source: E-mail interview

AIMS alumnus, Emmanuel Osalusi, Nigeria

Total support for marine renewable research

With a population of more than 141 million, an average temperature of around 28°C and up to six hours of sun each day – and that's in the rainy season - Nigeria could hardly be more different from the small islands of Orkney.

Not that any of that bothered Emmanuel Osalusi. When the Nigerian-born student arrived in Orkney a year ago he'd found exactly what he was looking for off Scotland's north coast.

"The most surprising thing about Orkney for me was to discover first class research facilities in the emerging area of renewable energy. It is this which, from my perspective, makes Orkney a place of global significance," he recalls.

Emmanuel is one of three PhD students at the International Centre for Island Technology (ICIT), part of Heriot-Watt University. He is there after winning backing from oil and gas giant Total and over the next year or so is researching the combined effects of currents and waves on tidal energy converters.

Using equipment known as Acoustic Doppler Current Profilers (ADCP), Emmanuel has been measuring current and wave flows at the Fall of Warness tidal test site. His results should give a better understanding of the extreme cases under which marine energy converters will need to operate – information which will prove crucial for the ongoing success of EMEC, the world's first tidal test centre.

Emmanuel Osalusi, seen here with fellow Phd students, Piya Pamphumeesup from Thailand (left) and John Ruscoe, from Orkney (right).

"The very nature of research means you can never be certain what the outcome will be. But one of the biggest surprises so far is discovering the huge amount of energy in the tidal currents at the Fall of Warness which, potentially, is enough to power the whole of Orkney," he says.

Nigeria is one of the world's top producing oil nations and its upstream oil industry is viewed by many as the country's lifeblood. It was the dominance – many would say dependence – on oil which first sparked Emmanuel's interest in renewable energy.

"Around 80% of Nigeria's budget comes from oil. But when I was living and studying there not only were wells drying up but lives were also being lost due to spillage, fires and civil unrest.

"I began asking myself 'what happens when the wells dry up?', and started to nurse an interest in specialising in an alternative energy course which has a constant source of supply. For me, that supply has to be tidal and Orkney has the best potential for tidal energy devices anywhere in the world."

Source: E-mail interview

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Tutor, Paul Taylor, USA 1/2

Where are you from?

- I am from Milwaukee, Wisconsin in the United States

What did you study undergraduate and where?

- I did my undergraduate in the U.S. at Boston College. There, I majored in two subjects, physics and Classics

What have you done since you graduated?

- After I finished my undergraduate in 2004, I started a doctorate in Astrophysics in the U.K. at Oxford University. I have recently submitted my thesis

How did you first hear about AIMS?

- A cosmologist in the Astro. Dept. at Oxford had taught courses at AIMS for a number of years, and he emailed the graduate students about the place, in case any were interested in teaching/working there

Are you an ex-AIMS student?

- No

Why did you apply to AIMS?

- I had kept the place in the back of my mind since hearing about it. I was quite interested in being involved in some teaching after finishing my doctorate. But I quite liked the multi-disciplinary nature of AIMS -- the curriculum combines a pretty astounding variety of maths, physics and computational sciences

Source: E-mail interview

Tutor, Paul Taylor, USA 2/2

What makes AIMS special? What is different compared to other universities?

- Part of it is the broad scope of the courses given; it really combines a lot of maths and physics, and from a realistic approach of computing things. It also emphasizes problem solving skills and inventiveness-- they have to see connections between all the different maths and physics that they have learned and are learning. I think a lot of other university curricula teach these subjects in very separated ways, following one distinct topic or area of research by itself. But AIMS is more about showing students how to approach problems, and to use pieces of what they've learned in all of their studies. It's a very powerful way of going about science I think. (Of course, there has to be a component of focused study as well, to have a good background and deeper insight into a field.)

What is the one anecdote that best describes your AIMS experience?

- (I'm sorry, but I'm really drawing a blank on this; I'm sure there are lots, as many humourous things happen around here...)

How prepared are your students? How is your relation with students?

- They all have a strong background in some area of maths/physics. The curriculum is so broad at AIMS that they will take courses in which they are very comfortable and also in which the material is quite new. The challenge is for them to quickly pick up on the new material, but it helps that they all have a good maths background. I'd say that the one area in which most students are lacking is computer experience. But in the beginning of the course, there is a large emphasis in learning how to program and to be comfortable with computers in general. I guess I spend a lot of time with the students-- in class and during tutorials, but also at meals and just around AIMS in general or walking around the neighbourhood and Cape Town. People discuss maths and physics, ask about other home-countries, things in the news, etc. It's very collegial around AIMS, I'd say

What is your future career view? How do you think AIMS fits into this?

- I will probably start a post doc. in the US, in biophysical or biomedical research. I'd quite like to stay involved with AIMS, perhaps returning as a lecturer at some point (sooner rather than later). But I'll have to talk with Fritz about that . . .

Source: E-mail interview

Tutor, AIMS alumna, Mihaja Ramanantoanina, Madagascar

Where are you from?
- I am from Madagascar

What did you study undergraduate and where?
- I did Mathematics at the University of Antananarivo, Madagascar

What have you done since you graduated?
- I came to AIMS shortly after my graduation, and after completing the AIMS programme I went to the University of the Witwatersrand to follow a Master programme in the School of Computational and Applied Mathematics, where I was also tutoring undergraduate and Hons students

How did you first hear about AIMS?
- A lecturer at the University of Antananarivo visited AIMS when I was completing my Hons degree, and when he came back, the told us a lot about AIMS and recommended AIMS to us

Are you an ex-AIMS student?
- Yes, I am

Why did you apply to AIMS?
- I applied to AIMS for different reasons. I always wanted to do pursue my studies as far as I can, and I thought AIMS was a good place to start (and yes, AIMS is). I also applied to discover the world of English speaking nations

What makes AIMS special? What is different compared to university?
- A lot. The interraction with the lecturers and among students. The environment where we are working. AIMS is homy, AIMS is a family. At AIMS we learn to be good not to get good marks

What is the one anecdote that best describes your AIMS experience?
- AIMS = African Institute for Missing Sleep. Not only we have a lot of assignments and deadline to reach, but we have also tones of parties during which to sleep late

How prepared are your students? How is your relation with students?
- Students at AIMS come from various universities and faculties, countries, cultures etc, and it is just very natural that the have very different background. I find some students are a bit struggling in some topics and other students have problem with other topics. My relation with students: We work together, laugh together, go to church with some students etc but I guess the students would provide better answers :))

What is your future career view? How do you think AIMS fits into this?
- I want to become an academic in the future, and I think AIMS has provided a good experience in different areas, including teaching and research, communicating with different people from different cultures etc.

Source: E-mail interview

Tutor, Matteo, France

“AIMS, with its body of students from all over Africa offered me the chance to share the knowledge I had acquired in theoretical physics in Paris. Working as a tutor, I enjoyed a wonderful time confronting ideas, discussing opinions, addressing (sometimes even solving!) math and physics conundrums with passionate and generous students. Many of them are now good friends, whom I long to meet again in Africa or elsewhere. Now that I have come back home, I no longer hope that Africa can rise and shine someday – I know it can”

Source: E-mail interview

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Lecturer, Pedro Ferreira, UK

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How did you first hear about AIMS?

- I heard about AIMS through Neil Turok whom I have known since 1991

Why did you choose to come and teach at AIMS?

- I had never to be Southern Africa and was intrigued. I was interested in meeting all these students from very different backgrounds and witnessing the African Renaissance at first hand

What is different about AIMS as compared to your university?
In other words, What makes AIMS special?

- The extreme dedication that AIMS students have to their work and their wonderful generosity in sharing their different expertise with each other. It is, of course, a truly international environment, more so than anywhere else I have been in the world

Do you have one specific anecdote from your time at AIMS?
If so, would you share it with us? What is your favourite memory of AIMS?

- I was on sabbatical in AIMS from January to April 2006 with my son (who was 10 at the time). The students would constantly approach him and befriend him and play with him. He has extremely fond memories of our time there and so do I

Have you hired any students from AIMS to work at your university/department?
If so, how many and to do what? Are they different to students from other universities?

- Unfortunately I haven't had the opportunity to do so yet

Source: E-mail interview

Lecturer, Alan Mcfarlane, U.K.

Where are you from? What do you teach and where?

- Cambridge in England. I am retired. I used to teach applied mathematics in DAMTP (Dept. of applied maths and theoretical physics) in Cambridge and gave tutorials at St John's College

How did you first hear about AIMS?

- It was well known in DAMTP before 2003 that Neil Turok was working toward the launch of AIMS. So I knew it was going to happen the instant I retired. I immediately came here after my retirement in September 2003. I also knew what Toni Beardon was planning – that is, AIMSSEC

Why did you come to teach at AIMS?

- Because it looked like a worthwhile a project. Its idea is similar to the year's voluntary service that many school leavers do before they go to college

What is different compared to your university? What makes AIMS special?

- The family atmosphere, the availability of a computer terminal dedicated to each student and the clear commitment of the students

What is your favourite AIMS memory?

- In the first year, the students regarded my wife and I as 'in loco parentis', and addressed messages to me as 'Dear Father Alan'. Another thing that makes me happy each year is to receive a card signed by all the students with many kind messages

Source: E-mail interview

Lecturer, Jeff Sanders, Australia/Macau 1/2

How did you first hear about AIMS?

- Dr Sanders first heard about AIMS when visiting the Mathematics Department of the University of Stellenbosch in 2006

Why did you choose to come and teach at AIMS?

- Dr Sanders chose to teach a course at AIMS because of the exciting prospect of teaching enthusiastic students with a solid Mathematic background who might not otherwise experience modern material on Computer Science. He was also tempted by the prospect finding good graduate students

What is different about AIMS as compared to your university?

- In other words, What makes AIMS special? AIMS concentrates just on Africa whilst UNU-IIST is concerned with all developing countries

Do you have one specific anecdote from your time at AIMS? If so, would you share it with us? What is your favourite memory of AIMS?

- Dr Sanders's memories of AIMS are rich and varied. Association with AIMS has been a pleasure

Have you hired any students from AIMS to work at your university/department? If so, how many and to do what? **Are they different to students from other universities?**

- UNU-IIST has offered fellowships to three AIMS students who have all accepted. The task of each is to write a research paper jointly with Dr Sanders during their 9-month stay in Macao

Source: E-mail interview

Lecturer, Jeff Sanders, Australia/Macau 2/2

Dr J W Sanders
International Institute for Software Technology
United Nations University (UNU-IIST)
Macao SAR China

Dr Sanders is Australian and trained in Pure Mathematics (B.Sc Hons, Monash University; PhD Abstract Harmonic Analysis, Australian National University) in Australia. After five years as a lecturer in Pure Mathematics at the University of New South Wales he moved subject to Computing Science and position to Sydney's University Institute of Technology before taking six months' sabbatical leave at the Programming Research Group in Oxford. 22 years later he moved from Oxford to UNU-IIST

His interests concern the use of Mathematics in Computer Science and in particular the area known as Formal Methods. UNU-IIST's objectives are to build capacity in Software Technology in developing countries, with particular reference to academic research and teaching but also to Software in general

In April 2006 Dr Sanders presented a seminar on the Mathematical foundations of Programming at AIMS. In January 2008 he taught, jointly, a course on Functional Programming at AIMS and in January 2009 is teaching a course Introduction to Computer Science. In 2008 he supervised four AIMS essays in various aspects of Theoretical Computer Science

Pictures of Dr Sanders at AIMS appear in the collections taken by Patrick Dorey, January 2008

Source: E-mail interview

Lecturer, Robert De Mello Koch, South Africa

How did you first hear about AIMS?

- We had a summer school in Stellenbosch in 2002. Neil Turok was lecturing at that school. I heard that Neil had this vision for AIMS. At that stage AIMS was just an exciting idea. I must admit that I thought the project was an excellent idea, but extremely ambitious and I wondered if it would be possible. Not only has AIMS become a reality: it effortlessly exceeded the initial idea I had!

Why did you choose to come and teach at AIMS?

- I am an African and I love my continent and its people. I want us to succeed and improve. By coming to AIMS I feel like I'm doing something useful and that I am making a difference. I feel like AIMS is an African solution to an African problem

What is different about AIMS as compared to your university? In other words, What makes AIMS special?

- My university, mostly, admits people with the funds to pay for a university education. This is mostly people who come from a pretty good background already. At AIMS it is different – AIMS catches the people that have the talent that is needed but no other opportunity. Its life changing – the people AIMS helps would probably not have a way forwards without AIMS

Do you have one specific anecdote from your time at AIMS? If so, would you share it with us? What is your favourite memory of AIMS?

- I don't really have a favourite anecdote. My favorite memory of AIMS was the party held when I left AIMS the first time. I had enjoyed teaching and interacting with the students for 3 weeks. The students then threw a party to say thank you. Their thank you was so sincere and warm. I was not expecting what they did and I got totally swept up in the moment

Have you hired any students from AIMS to work at your university/department? If so, how many and to do what? Are they different to students from other universities?

- I have had one AIMS MSc. student, Wolobah Sali. Wolobah has just completed an MSc. in geophysics and we have submitted a joint paper for publication. All of my students are quite unique, and this was true of Wolobah too. He was extremely hard working and persistent – I like that - a student who struggles till they get it. Another great thing about Wolobah was how much he enjoyed the little victories along the way
  Robert de Mello Koch robert@neo.phys.wits.ac.za

Source: E-mail interview

Lecturer, Jesus Cerquides Bueno, Spain

"There is an African spirit floating around which definitely makes AIMS different, but also students are definitely more brilliant and hard-working than average

Every year I am shocked by how difficult it has been to some of the students to get their education compared to what happens in Europe. Their effort and success stories are amazing."

Photos: Jesus Cerquides Bueno, from Barcelona (with current students)

Source: E-mail interview

Lecturer/Supervisor, Ekkehard Kopp, Germany/South Africa/UK 1/3

Dear Marie-Pierre

Thank you for your email. I'm happy to provide you with something for your brochure. The attached describes my involvement with AIMS, and has become rather long, perhaps because my involvement has been quite extensive. Feel free to cut it in any way you like, though you may wish to check you final text with me for accuracy

You also ask about Dimby. I first met her when she was at AIMS, of course, and read and commented on her essay (which was supervised by Dr Diane Wilcox). In August 2008 I agreed to supervise her MSc at Stellenbosch, jointly with Dr Maciek Capinski, who took over principal responsibility for guiding her work in January 2008. Dimby was an excellent student, hard-working and able to work independently from the start. She produced an excellent thesis, which was completed within 12 months. I believe it is still being examined at Stellenbosch but have no doubt that she will do well

Dimby's research centred on a new approach to option pricing, the 'Growth Optimal Portfolio' pioneered by Prof Eckhard Platen (Sydney) and she was able to make full use of his presence at the February Summer School to interact closely with him. He was clearly impressed by her abilities and attitude and suggested that she might apply to work with him for her PhD upon completion of her studies in Stellenbosch. At present I am not sure if this will indeed happen (but Fritz Hahne may know), as I am no longer at AIMS

I also attach two photos of myself with Dimby, taken in May at the opening of the AIMS Research Centre

Please let me know if you require further information

Best regards

Ekkehard Kopp

attached: photo with Dimby

Source: E-mail interview

Lecturer/Supervisor, Ekkehard Kopp, Germany/South Africa/UK 2/3

AIMS

- My involvement with AIMS began purely by accident: in February 2003 I visited Stellenbosch (my old *alma mater*, which I had left for the UK in 1967, and had not seen since that time) where I met Prof Fritz Hahne, then Director of Special Programmes at the recently formed Stellenbosch Institute for Advanced Studies (STIAS), who was soon to become the first Director of AIMS. The purpose of my two-week visit was to assess the prospects for involving major mathematics and statistics departments at South African universities in the proposed development of a new research centre in mathematical epidemiology

To relate how this came about I should first provide some brief biographical notes

- In 1953, at the tender age of nine, I emigrated from Germany to South Africa with my parents. Having completed my matric in Paarl in 1962 I went to Stellenbosch University to study mathematics (together with physics and chemistry). Following completion of my BSc Honours in Mathematics I gained a Rhodes Scholarship to enter Balliol College, Oxford in 1967, where I completed my DPhil. I commenced work at the University of Hull, U.K., in 1970, where (apart from various visits abroad) I spent my entire academic career. I was Pro-Vice-Chancellor at Hull from 1996 to early 2003, and finally retired from my chair in Mathematics in 2004
- Following my retirement from the Pro-Vice-Chancellorship I was fortunate to have an extended period of study leave, and my visit to Stellenbosch formed part of this. The idea for the development of an epidemiological research centre had recently been raised with the Director of the SA Government's Department of Science and Technology (DST) by my old friend, Dr Brian Williams, who was then working as senior epidemiologist at the World Health Organisation (WHO) in Geneva
- My fact-finding mission was intended to assess the scope of interest and expertise among likely South African participants in such a project. It led, in due course, and with much assistance from Fritz Hahne and others, to the establishment of the South African Centre for Epidemiological Modelling and Analysis (SACEMA), which is now housed at the STIAS premises and is one of the 7 centres of Excellence supported by the DST. I served as the initial chair of its Board of Trustees, and went on to spend considerable periods from 2004 to 2008 in Stellenbosch in the development of this successful project
- During my initial visit in early 2003 Fritz Hahne told me about the plans for AIMS – which was to admit its first cohort of students that September – and showed me the shell of the former hotel which has since found fame as the original AIMS building in Muizenberg. The town was then just recovering from its slump during the 1990s, but it was already apparent that AIMS could become a significant factor in its regeneration. The transformation of the building, from the wreck I saw in February 2003 to the splendid learning environment its had become just nine months later when I saw it again, was nothing short of miraculous
- While we were discussing the development of the AIMS curriculum, Fritz Hahne expressed interest in developing a three-week module in my own principal area of research, namely 'financial mathematics', or as I prefer to call it, Mathematical Finance. The application of advanced probabilistic techniques to the pricing and placing of sophisticated financial instruments (beginning with options, futures and swaps) had been a major area of research in mathematics and economics for the past three decades, and it seemed right that AIMS should include it in its offerings

Source: E-mail interview

Lecturer/supervisor, Ekkehard Kopp, Germany/South Africa/UK 3/3

- This is how I came to provide one of the advanced modules in the AIMS programme in early 2004, repeating the experience in 2005 and 2007 (first with Prof Berndt Oksendal of Oslo, and finally with Dr Alet Roux, now at York University). There was much interest in this area of work, and a large number of AIMS students have completed their final essays in topics we and others provided over the years. Several of them decided to continue their studies in this subject area, including two who completed MSc degrees under my supervision at Stellenbosch: Gawie le Roux in 2007 and Dimbinirina Ramarimbahoaka (universally known as 'Dimby' at AIMS) in 2008
- Mathematical Finance has become one of the three initial focus areas for the new AIMS Research Centre, opened in 2008, and we can claim the 'first' AIMS Research Workshop too: in February 2004 I was able to persuade a number of senior international colleagues who were in South Africa for a research meeting to hold a one-day research workshop at AIMS with the participation of local academics and finance practitioners as well as AIMS students. We followed this up in 2007/8 with research visits by senior figures in the field and with a highly successful week-long Summer School and Research Workshop in February 2008, which attracted over 50 researchers, students and practitioners country-wide. The second Summer School is planned for February 2009, and it looks likely that this will become an annual feature at AIMS
- Mathematical finance is currently getting rather a bad press (entirely unfairly!) in the wake of the financial collapse caused by wild excesses, greed and sheer stupidity in unregulated markets, especially in the USA. The reality is, of course, that this can only be solved by proper regulation, based on a better understanding of the mathematical principles underpinning the functioning of financial markets. Thus there is now an even greater need for the expertise imparted by this aspect of the AIMS programme
- I am delighted that the other part of my involvement with AIMS also continues to prosper, in the development of modules in mathematical biology and short training courses held jointly with SACEMA, as well as in the choice of mathematical biology as one of the other two focus areas for the Research Centre
- Finally, it is an honour to serve on the Editorial Board of the new AIMS series published by Cambridge University Press. These little texts, based firmly on the AIMS experience of interactive and problem-oriented introductions to research methods in mathematics and physics, will provide a much-needed affordable resource to help unlock mathematical talent throughout Africa. Thanks to the energy and foresight of Prof Alan Beardon they are destined to succeed
- AIMS is a major force for good in Africa. Its creation was both timely and far-sighted. It has already achieved success well beyond what can reasonably be expected, given the modesty of its funding and initial scope. It prospers and excels for two main reasons: the enthusiasm and commitment of its excellent students (whom, along with many AIMS lecturers, I consider to be the best and most rewarding groups I've ever had the pleasure to teach) and the selflessness of its staff and of the many international lecturers it attracts. Long may it continue to create happiness and knowledge in equal measure!

Source: E-mail interview

Supervisor, Rachid Ouifki, Morocco/South Africa

Leads a group at SACEMA

“The AIMS culture is something unique. Students are exposed to various fields of expertise. All those who come from AIMS and are now working on disease modelling at Stellenbosch University, in the SACEMA group, are extremely wee-trained”

Source: E-mail interview

Researcher, Aziz Ouhinou, Morocco

Where are you from?
I am from Morocco
What did you study undergraduate and where?
Population Dynamics, Cadi-Ayyad University, Morocco
What have you done since you graduated?
I got my PhD degree on April 2007, I taught Mathematics for 5 months at Beni-Mellal University, Morocco. 1 month latter I came to AIMS as researcher visitor for 3 months, I participated to tutorial activities. Now I am post-doc researcher at AIMS since August 2008 up to 2010
How did you first hear about AIMS?
From University of Cadi-Ayyad when I was a PhD student
Are you an ex-AIMS student?
No
Why did you apply to AIMS?
After I finished my PhD, I was seeking for a convenient job where I could improve my research skills. Before I came here I got a post-doc fellowship at Lahoure University. Since, during my first visit at AIMS, I knew more about it, and many things encouraged me to be here now, among them, the facilities and the scientific atmosphere offered by AIMS to ensure graduate studies for more African students either in mathematical or physics field. I was pleased by its honorable objectives about the development of science in Africa. According to my situation as a post-doc researcher, AIMS-institution offers me all the facility needed to achieve my objectives in research and to improve my career. For this reasons, I am here
What makes AIMS special? What is different compared to university?
AIMS gives the opportunity to many African students, with different scientific background, to do their graduated studies. It offers them all the facilities to succeed one year of basic and skill courses given by selected professors. Through this year, AIMS insures a very useful background in mathematics and physics sciences, which leads its students to start their master or Ph.D. in Sciences in various universities over the world
What is the one anecdote that best describes your AIMS experience?
I came for 2 months and now I am here for two years, maybe more
What is your future career view? How do you think AIMS fits into this?
I would like to be a professor in applied mathematics with an interest in the ongoing issues in biomathematics, epidemiology, financial and to contribute in the evolution of mathematical science

Source: E-mail interview

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- **Academic partners**
- Other

Academic partners, Vincent Rivasseau, France

- The French University of Paris-Sud 11 has sponsored AIMS since its foundation. Vincent Rivasseau, a mathematical physicist specialist of constructive quantum field theory and its applications, who has been advocating advancement of science in developing countries for many years, has been associated with AIMS from the start, being a member of its Council and teaching there every year. He is also engaged in the AMI-Net project and in particular in the creation of an AMI node in Senegal, one of the most promising countries to host an AIMS centre
- After studying at Ecole Normale Superieure (Paris) and Princeton University (NJ, USA) Vincent Rivasseauu specialized as researcher in quantum field theory and its applications. He is currently working on non-commutative geometry and quantum gravity. For many years he has been advocating advancement of science in developing countries. He has been associated to AIMS from the start, being a member of its council and teaching almost every year there. One of his sons, Christian, was tutor at AIMS in 2007
- “I am a mathematical physicist specialist of constructive quantum field theory and renormalization. I have worked to apply this theory especially to the problem of interacting Fermions in condensed matter. More recently I am trying to develop quantum field theory on non commutative space-time. Since 2001 I am a professor in the physics department of University Paris-Sud XI at Orsay, France. Each of my stays at AIMS has been a ray of sun and hope illuminating the rest of the year. When discouragment looms large, a glance at the picture of the AIMS students is the best remedy. AIMS is a dream that became real. Let's continue it together.”
- The University of Paris-Sud 11 is one of the most famous French universities, active in almost all fields of knowledge except human sciences. Together with the other Paris universities it is direct heir to the ancient Sorbonne university founded in 1257. It hosts about 30 000 students, more than 120 research laboratories and the largest campus in France. This campus is spread over five locations, namely the towns of Orsay, Sceaux, Châtenay-Malabry, Cachan, and Kremlin-Bicêtre, all in the southern suburbs of Paris
- The Université Paris-Sud has a complete array of competences, ranging from the purest of exact sciences to clinical practices in medicine, and covering life and health sciences, legal sciences and economics. It is particularly renowned in mathematics and physics. A number of the best French mathematicians are or were affiliated to Paris-Sud University. Among those are the Fields medalists Laurent Lafforgue, Jean-Christophe Yoccoz and Wendelin Werner. The department of physics counted Physics Nobel prize laureates Pierre-Gilles de Gennes (1991) and Albert Fert (2007) among its professors, and is host to large experimental facilities such as the Orsay linear accelerator
- Vincent Rivasseau, Professor of Mathematical Physics, Université Paris-Sud XI, France. Member of the AIMS Council, lecturer, and currently working on the creation of an AIMS centre in Senegal

Source: Class interview

Potential academic partner – Madagascar

Photos available in Madagascar folder

Institution: Department of Mathematics, Univeristy of Antananarivo
Representative of AIMS: Gerard Razafimanantsoa

Our Department of Mathematics and AIMS

- The Department of Mathematics of the University of Antananarivo began in the mid-60s. The lecturers were almost all French. Now we are 32, all Malagasy, and three-fourth are over 50 years
- Now the research interests of the department are essentially combinatorics, numerical analysis, mechanics and number theory
- Almost all our graduate students wish to continue their studies at a postgraduate level. Unfortunately, many of them have to find a job, other sources of income, to be able to afford such a program. The workload for a low paying job is so heavy that it would not give sufficient time for studies, even on a part-time basis
- Since 2004, when I met two wonderful people who are professors Fritz Hahne and Niels Turok, much has changed
- 21 students from Madagascar (one Comorian) are sent to AIMS. 18 from our department (1 recruited as a tutor), 2 from the Department of Physics and 1 from the Mathematics Department of an other Malagasy University
- 5 just been admitted to the AIMS,
- 4 has started their Master degree (1 at the University of the United Nation in Macao, 1 at the University of Stellenbosch and 2 at the University of Cape Town)
- 6 have completed or are in to finish their Master degree (4 at the University of Stellenbosch, 1 at the University of Cape Town and 1 at the University of Cambridge)
- 5 are in Ph.D. position (2 at the University of Johannesburg, 1 at the University of Essen and 1 at Herriot-Watt University)
- They study in various fields of Mathematics – pure mathematics, mathematics of finance, bio-informatics . . .
- The number of students enrolled in 3rd year of mathematics in our department has steadily increased in recent years. This year there were 130. There is great competition between them. They know that the best will be rewarded . . . They can continue their studies in Mathematics
- My real problem now is that students are constantly asking me when is the opening of AIMS Madagascar

Gérard Razafimanantsoa
Representative of AIMS in Madagascar

Source: Partner e-mails

Potential academic partner – Ghana

Photos available in Ghana folder

Institution: Institute of Mathematical Science, Accra
Representative of AIMS: Francis Kofi Ampenyin Allotey

INSTITUTE OF MATHEMATICAL SCIENCES

P. O. Box LG 197
Legon - Accra
Ghana - West Africa

November 7, 2005

- A short statement on what all of this means to Ghana and to Africa
- Since its inception, IMS has produced 17 PhD's all working in Ghana except two. The current heads of mathematics Department of the University of Cape Coast, University of Education, Winneba, Kwame Nkrumah University of Science and Technology and the head of Physics department at the University of Ghana obtained their PhD through the Institute
- It has also produced 17 MSc students some of which are working towards their PhD degree. For over ten (10) years the Institute has organized annually, African Regional workshops/Colleges on:
- Functional Analysis, Differential Equations and Applications
- Modelling, Simulation and Optimization
- Apart from the universities, our graduates are working in scientific organization such as
  - Council for Scientific and Industrial Research
  - Ghana Atomic Energy Commission
  - Ghana Geological Services and
- Ghana Meteorological Agency
- Every year about 80 participants from other parts of Africa attend some of our workshops, colleges and conferences. In other African countries some of the past participants of our activities are holding important positions like Deans of Faculties and heads of departments
- Past participants of our activities had come from countries such as: Rwanda, Niger, Senegal, Benin, Egypt, Algeria, Kenya, Burkina Faso, Tunisia, Ethiopia, Liberia, Nigeria, Cote D'Ivoire, DR Congo, Sierra Leone, Cameroon, Botswana, Uganda, Togo and South Africa
- Our students work on diverse fields ranging from pure mathematics and applied mathematics to Nano Science, Climate, Biological Infectious Disease and Energy Modelling

PROF. F. K. Allotey
Director

Source: Partner emails

Potential academic partner – Ethiopia 1/2

Photos available in Ethiopia folder

Institution: Department of Mathematics, University of Addis Ababa
Representative of AIMS: Berhanu Bekele

Addis Ababa University, Faculty of Science, Department of Mathematics

Historical Background

- The establishment of the University College of Addis Ababa (UCAA) in 1950 marked the beginning of higher education in Ethiopia. UCAA started with a program which consisted of only two areas of study, section A and section B. In section A, students took pre-engineering courses that enabled them to pursue further studies abroad in engineering. In section B, students were prepared for further studies in medicine, biology and related fields
- During the 1959–60 academic year, three Degree programs were launched in the following combinations of subjects: Combination A - *Mathematics and Physics*, Combination B - *Biology and Chemistry*, Combination C – *Chemistry and Geology*
- In 1961, UCAA was expanded, reorganized and named Haile Selassie I University (now Addis Ababa University) with the establishment of the Faculty of Science consisting of the Department of Mathematics and four other departments all offering a degree program. The main objective of the Department of Mathematics was to produce mathematics teachers for secondary schools. Since then the Department has grown considerably, offering BSc degree (in mathematics, mathematics education and Computer science), MSc and sandwich PhD programs. Currently, the Computer Science and the Mathematics Education streams have become full-fledged departments under the College of Informatics and College of Education respectively. As a result, at the undergraduate level, the Department of Mathematics offers degree program in mathematics only for regular and extension divisions. In addition, it has continued to provide a vital support to the academic programs of several departments in AAU by offering a wide range of service courses
- The Department of Mathematics aspires to be a prominent mathematical center committed to the advancement and dissemination of mathematical knowledge, and to the training of motivated and responsible mathematicians who will contribute to the scientific and technological development of Ethiopia
- Research is also conducted in the following areas of Mathematics: Algebra, Analysis, Combinatorics, Differential Equations, Numerical Analysis, Optimization and Systems and control theory with emphasis in algebraic systems theory.
- There were two students from our Department studying at AIMS last year. Currently one of the students is in the US for her PhD study and the other one has got also admission at Stellenbuch University to pursue her study. There are also Ethiopian students admitted to the program this year

Future Plan of the Department

- Launch in-house PhD
- Strengthen sandwich PhD
- Strengthen research groups and promote interdisciplinary research
- Strengthen its cooperation with government and Non-government organizations to help it extend its capabilities

Source: Partner emails

Potential academic partner – Ethiopia /2

Dear Sir/Madam

The following are worth reminding to justify the wisdom of selecting Addis Ababa as a home for AIMS

- The Mathematics Department at Addis Ababa University has a long tradition of providing a strong solid training in Mathematics, both in Bachelors and Masters Level. It has produced several dozen graduates who went on and successfully completed a Ph.D. work mostly in the U.S. and some in Europe. There is a consensus among these Alumni that the training they received in the major areas of Mathematics in our department has adequately prepared them to succeed in pursuing Advanced degree and for the work place, abroad as well as at home. Moreover, the Department of Mathematics at AAU, since its establishment in 1961, has produced, more or less, most of the teachers who has been teaching in this nation of 80 millions
- The Department of Mathematics at AAU, because of its long experience as a center for training Mathematics teachers and future Mathematics researchers that are fit for building a Modern Nation, has the right tradition, record and central location for hosting AIMS. Also, since Addis is a Seat of African Union(AU), if AIMS gets located in Addis due to the fact that having Citizens trained in Mathematics is one of the pre-requisites to build modern infrastructure and Industries, the AIMS will be most suitably located to raise awareness of the centrality of Mathematics in Science & Technology and rally more support from AU member Countries and other sympathetic International Organizations

Source: Partner emails

Potential academic partner – Sudan

Photos available in Sudan folder

Institution: Department of Statistics, Faculty of Mathematical Sciences, University of Khartoum
Representative of AIMS: Manar E. Abdel-Rahman

Manar E. Abdel-Rahman, PhD

Associate Professor of Biostatistics
Department of Statistics
Faculty of Mathematical Sciences
University of Khartoum, Sudan

“AIMS Khartoum will provide an opportunity to pioneer in the area of Mathematical Sciences within Sudan, a country with very rich talents in this area striving to race with the vehicle of development. With Sudan possessing a unique status being a vital link between the southern and northern parts of Africa, the prospect of diverse interactions and benefits can not be missed.”

Source: Partner emails

Potential academic partners – Uganda and Benin

Photos available in country folders

Uganda
Institution: Department of Mathematics, University of Makerere, Kampala
Representative of AIMS: John Mango

Benin
Institution: Institut de Mathematiques et de Sciences Physiques (IMSP)
Representative of AIMS: Joel Tossa

Source: Press clippings

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Other – testimonials

"At this beginning of a new millennium, there is increasing scientific evidence that Africa is, indeed, the cradle of humanity and its civilization, culture, mathematics and science. Yet at this time, the modern voice of the continent and its peoples in the area of the mathematical sciences has yet to be heard on the world stage. A primary purpose of AIMS is to unleash this unheard voice in a new renaissance.“

S.J. Gates, Jr.,

John S. Toll Professor of Physics and Center for String and Particle Theory Director

"This venture, initiated by an outstanding group of committed researchers and teachers, could be extraordinarily cost-effective in fostering youthful talent and scientific excellence in South Africa and beyond."

Professor Sir Martin Rees,

Astronomer Royal, Cambridge, U.K.

"The development of the mathematical sciences is a visionary and cost-effective investment in Africa's future. All credit to the AIMS team."

Professor Chris Brink, Vice-Chancellor,

University of Stellenbosch

"Africa's problems are awesome and their solution must be multifactoral. But there can be no doubt that training in the sciences and technology, based on the impressive foundations already existing in South Africa, must be one of the keys to unlocking the continent's potential and empowering its citizens. This project is an impressive and well thought out approach to a new era for African science and mathematics."

Professor Sir Alec Broers, Vice Chancellor,

University of Cambridge

"The African Institute for the Mathematical Sciences, by bringing students in contact with excellent local and foreign scientists in a program that covers the many of the most exciting areas of modern science, offers an innovative and creative approach to developing scientific talent in Africa. The potential benefits for scientific and technological development in Africa are enormous."

Professor David Gross, Director,

Institute for Theoretical Physics, Santa Barbara, U.S.

Source: Interviews

Other – testimonials

"I have been delighted to see the progress of the African Institute for Mathematical Sciences (AIMS). In record time it has built a reputation for excellence, innovation and a true spirit of pan-Africanism. The global recognition it has earned is well-deserved, and I consider it a model for the development of mathematics and science in Africa. The Next Einstein initiative, which seeks to establish AIMS Centres all over Africa, is an inspirational programme which I strongly support. This simply must happen"
His Excellency Paul Kagame, President of Rwanda

"This institute will bring Africa to the cutting edge of science. Those were my words five years ago, when I learned of the ambitious plan to create AIMS. The progress made since then has been startling. AIMS is now generating a stream of well-prepared students entering many advanced areas of science. The Next Einstein plan, to create AIMS centres all over Africa, is even more exciting. Its implementation will have a major impact on Africa's development. Not only will this be vital for the continent, I believe it will be important for the future of science because science needs Africa's talent. I am keenly looking forward to meeting prospective young Einsteins from Africa"
Stephen W. Hawking, renowned cosmologist

"These flagship institutes could help kick-start a scientific boom in Africa and are an extraordinarily cost-effective step towards achieving this goal"
Lord Martin Rees, Master of Trinity College, Cambridge, Astronomer Royal and President of the Royal Society, U.K.

"AIMS is a remarkable achievement and an example of what can be done. I strongly support the plan to create many AIMS centres across Africa"
Mark Shuttleworth, first African in space and free software pioneer

"This is a brilliant project and a wonderful cause, as I saw for myself at first hand at the May 11th launch in South Africa. The next Conservative Government in Britain will seek ways of supporting and helping develop the AIMS agenda"
Andrew Mitchell MP, Shadow Secretary of State for International Development, U.K.

Source: Interviews

Other – testimonials

"I am very impressed with AIMS and how it is enabling students from all over Africa to study together and to enter high level math and science. The NextEinstein program to create many AIMS centers across Africa is an important initiative which I strongly support. The AIMS graduates are an inspiration for Africa and for the world.
Peace and light."
Forest Whitaker
Renowned actor

"I am proud to be a supporter of AIMS since its inception, in 2003. Its progress since then has been simply astonishing. AIMS is now a proven model of how talented young Africans can be enabled to become successful researchers, contributing at the cutting edge of science and technology, in Africa. The Next Einstein initiative is a visionary plan which deserves support at the very highest level. If implemented, it will have a major impact, not just on maths and science, but on African development in general."
Hon Mosibudi Mangena
Minister of Science and Technology of South Africa

"The Next Einstein plan, for 15 AIMS Centres within five years, while ambitious, is fully achievable. Implementation of this plan would, I believe, have a transformational effect on science and technology capacity in Africa and on African development more widely. I believe this initiative to be fully in accord with the goals and spirit of the African Union and in particular of those of the Department of Human Resources, Science and Technology. I look forward to working in close partnership with AIMS, AMI-Net and other partners towards speedy implementation."
HE Professor Jean-Pierre Ezin,
Commissioner for Human Resources, Science &Technology, African Union

"It'll be wonderful to watch and see how this crowd of people get on with their lives and how they set about changing Africa as it inevitably joins the rest of the world – where it should be and where we need it."
Sir Bob Geldof
Musician and activist

Source: Interviews

Other – articles


nature materials

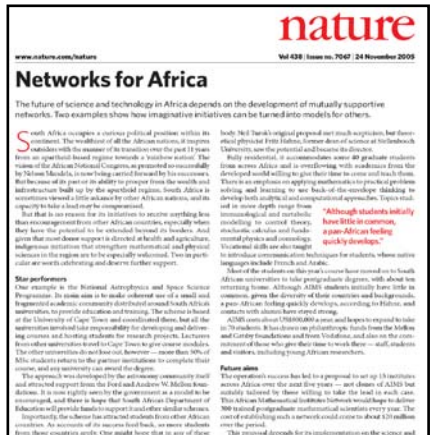
EDITORIAL

A penny for your thoughts

Even a small effort can have a big impact on science education in Africa. Why don't you try?


A global venture

An educational centre in Cape Town shows what can be done to boost science in Africa


nature

Networks for Africa


CAMBRIDGE LIFE

INSTITUTE FOR MATHEMATICAL

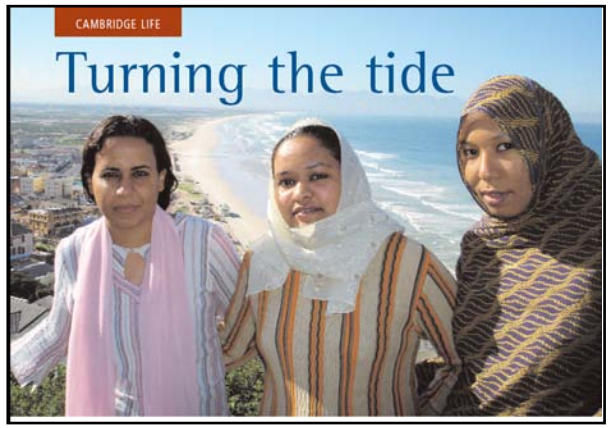
Cambridge Alumni


COMMENTARY

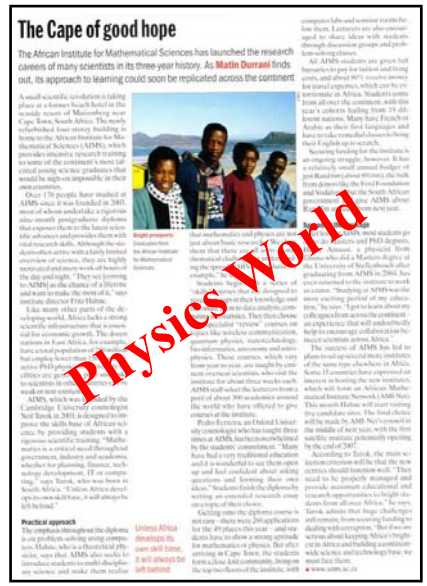
Advancing science in Africa

JEROEN VAN DEN BRINK* AND IZAK SWYMAN

The African Institute of Mathematical Sciences offers a successful template for other disciplines to teach science in Africa.


CAMBRIDGE LIFE

Turning the tide


The Cape of good hope

The African Institute for Mathematical Sciences has launched the research careers of many scientists in its three-year history. As Matin Durrani finds out, its approach to learning could soon be replicated across the continent

Physics World

Other – articles

http://www.elpais.com/articulo/educacion/einstein/africanos/elpepusoc/20081103elpepiedu_2/Tes

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Source: Press clippings