

**Ghana: Maciej Dunajski, University of Cambridge, UK, and the Department of Mathematics, University of Ghana, Legon, Accra**

The main contact was Dr Margaret McIntyre. Preliminary email correspondence was used to establish the general area of collaboration and the needs of the Department. It was agreed that a lecture course based on some reading material on differential equations would be appropriate.

The mentor made two visits to Accra, the first over December 29<sup>th</sup> - January 9<sup>th</sup> 2010, and the second over January 1<sup>st</sup> to January 9<sup>th</sup> 2011. He also attended the conference in Kenyatta later that year.

During the first visit the mentor gave a lecture course on the geometric aspects of differential equations which was well attended by MPhil students and the Faculty. He also talked to all Faculty members about their research.

The mentor noted problems in the department in Accra associated with the "generation gap". There are three retired faculty members educated in the sixties with a considerable research record, and some enthusiastic young people with an MPhil qualification and no research record, but nothing (apart from Margaret McIntyre - the current HoD) in between. The retired professors, now in their seventies, will soon stop teaching. The faculty is understaffed (they take around 300 mathematical sciences students each year) and one immediate solution is to hire new personnel.

Before the second visit, the mentor suggested a number of topics for MPhil dissertations. Once in Accra he talked to several MPhil students who took up these topics. He also gave lectures on integrable systems. The mentor arranged to meet with the Pro Vice Chancellor for Research - in his view the most useful aspect of the visit. The new PVC Professor Ntiamoa-Baidu seemed open-minded and agreed to prioritise the mathematics appointment; the mentor agreed to assist with the selection process for new positions. The PVC also agreed to direct some Carnegie money which the University had received to support the maths department. This means that there will be continue to be a funding stream post- MARM.

Future plans were discussed: it was agreed that a good strategy for further development is to work with MSc students.

One such student (Prince K. Osei) is now collaborating with Bernd Schroers at Edinburgh University, partly supported by the ICTP. Prince visited the UK last summer, where he visited his mentor in Cambridge. Similar plans were made to bring other MSc faculty members to the UK for a short visit, so as to enable them to meet and interact with other mathematicians in their own speciality area.



1. Mr. Eyrarn Schwinger
2. Dr. Douglas Adu-Gyamfi
3. Mr. John Degraft-Mensah
4. Prof. Daniel Acheampong
5. Dr. Magaret McIntyre
6. Mr. Thomas Katsepor
7. Mr. Joseph Jackson
8. Mr. Prince Koree Osei
9. Dr. Edward Prempeh
10. Mr. Peter Acquah
11. Mr. Isa Garba Abor (From Nigeria)