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 \* I S W I = International Space Weather Initiative \*  
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Attachment(s):

(1) "SCOSTEP-ISWI School report", 4.6 MB pdf, 28 pages.

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 : Re:  
 : [1] Recent SCOSTEP-ISWI School in Nairobi, Kenya.  
 : [2] Reminder about UNBSSI-derived centers.  
 :

Dear ISWI Participant:

There are two items today:

[1] I am most pleased to attach for your inspection the report of an important ISWI/SCOSTEP capacity building event that recently took place in Africa:

: "2013 SCOSTEP-ISWI School in Nairobi, Kenya."  
:

I received this 28-page, well-illustrated report from Dr. Nat Gopalswamy, who is the current President of SCOSTEP. The local counterpart for this school was Dr. Paul Baki, who is a well-known fellow in African space weather circles. (He is the host of the MAGDAS unit in Kenya, for example.)

If you conduct a space science school, please forward the school report to me so that I can share it with the entire ISWI community. Such a report has value only if it is read by a wide audience ! ... and this newsletter gets out globally.

At the recent CAWSES-II Symposium (Nagoya), I was happy that many of you came to me and expressed your continued interest in the ISWI Newsletter. Nice comments from readers encourage me to continue this work. But please contribute something from time to time -- I always seek good material from the readership.

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[2] Please be reminded that the UNBSSI (BSS+IHY+ISWI) led to the establishment of three Centres:

<1>  
Centre for Mathematical Sciences (CMS, India)  
<http://www.cmsintl.org/>

<2>  
Centre for Basic Space Sciences (CBSS, Nigeria)

<http://www.cbssonline.com/aboutus.html>

<3>

International Center for Space Weather Science and Education  
(ICSWSE at Kyushu University, Fukuoka, Japan)

[http://www.serc.kyushu-u.ac.jp/index\\_e.html](http://www.serc.kyushu-u.ac.jp/index_e.html)

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Note: I will attend the AGU Fall Meeting in San Francisco, hence  
the "ISWI Newsletter" be closed from Dec. 6 to Dec. 18. If you  
have news, please send the news before this period of time.

Happy Thanksgiving! for those in the United States,

. George Maeda  
. The Editor  
. ISWI Newsletter

# SCOSTEP/ISWI School Nairobi, Kenya Oct 21-Nov 1, 2013



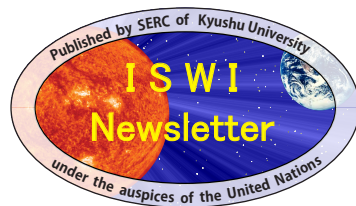
Nat Gopalswamy and Paul Baki

# Organizers

- **School Directors:**
  - Nat Gopalswamy (SCOSTEP)
  - Paul Baki (Technical University of Kenya)
- **The Local Organizing Committee:**
  - Paul Baki (Technical University of Kenya)
  - Andrew Oduor (Maseno University)
  - Harrison Amwayi (Technical University of Kenya)
- **Teacher Workshop:**
  - Deborah Scherrer (Stanford University)

# International Advisory Committee

- Dr. Sharafat Gadimova (UNOOSA)
- Professor K. Yumoto (Japan)
- Dr. Madhulika Guhathakurta (NASA)
- Professor Marius Potgieter (South Africa)
- Dr. Nicole Vilmer (France)
- Professor Vafi Doumbia (Cote D'Ivoire)



This 28-page pdf was circulated in Volume 5, Number 121, on 29 November 2013.

# Lectures

- Sun in the Universe (Legesse Kebede, Ethiopia)
- Solar Interior (Jesper Schou, Germany)
- Solar Dynamo (Mark Miesch, USA)
- Solar Atmosphere and Solar Wind (John Raymond, USA)
- Solar Flares and Coronal Mass ejections (Nat Gopalswamy, USA)
- Energetic Particles from the Sun (Dalmiro Maia, Portugal)
- Cosmic Rays, Cosmic Rays and climate (Nadir O. Hashim, Kenya)
- Space weather & Dynamos (Christine Amory Mazaudier, France)
- Solar wind-magnetosphere-ionosphere System (Nikolai Ostgaard, Norway)
- Sudden Ionospheric Disturbance (Deborah Scherrer, USA)

# Lectures...

- Basic Ionospheric Physics (Paul Baki, Kenya)
- Ionosphere and GNSS (Florence D'Ujanga, Uganda)
- Equatorial Ionosphere (Babatunde Rabiou, Nigeria)
- Data Processing in Ionospheric Studies (Andrew Akala, Nigeria)
- Atmospheric Physics (F.-J. Luebken, Germany)
- Data Analysis techniques (Farzad Kamalabadi, USA)
- Sun and Climate (Chris Oludhe, Kenya)

# Participants

- There were 39 students from 7 countries (Ethiopia, Kenya, Uganda, Tanzania, Rwanda, Malawi and Nigeria) and 17 lecturers from 9 countries (Ethiopia, Germany, USA, Portugal, Kenya, France, Norway, Uganda, Nigeria)
- High School students from Brookhouse School learned about Space Situational Awareness and Space Weather
- The teacher workshop had 20 participants from Kenya



# Other Activities

- Teacher workshop (Deborah Scherrer)
- Instrument workshop (D. Maia, C. Monstein, C. Amory – Mazaudier, N. Gopalswamy, B. Rabiou, D. Scherrer)
- Public lecture to high school students on Space Situational Awareness and Space Weather (D. Maia)
- All lectures were followed by hands-on exercises
- Discussion on SCOSTEP's VarSITI program (N. Gopalswamy) and VarSITI's ROSMIC program (F.-J. Luebken)
- Discussion on the Participation of African countries in international organizations such as SCOSTEP, ISWI, ILWS
- Discussion on African Geophysical Society (B. Rabiou)
- Participant Seminars

# SPONSORS

- Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)
- International Council for Science (ICSU)
- International Space Weather Initiative (ISWI)
- Committee on Space Research (COSPAR)
- Technical University of Kenya
- International Committee on GNSS (ICG), UNOOSA
- Japan Society for the Promotion of Science (JSPS)
- International Center for Space Weather Science and Education, Kyushu University, Japan
- National Space Research and Development Agency, Nigeria
- Several lecturers spent their own funds to get to the school

# Assessment by the Participants

ISWI/SCOSTEP SPACE SCIENCE SCHOOL

October 21- November 1, 2013

Nairobi, Kenya

## Assessment Questionnaire

Please assess the following activities by ticking appropriate responses on the following scale:

1 - Excellent

2 - Good

3 - Average

4 - Poor

	Activity	1	2	3	4	Total
1.	Delivery of the lectures	16	13	0	0	29
2.	The usage of multimedia system	10	17	5	0	32
3.	Participants participation	14	15	9	0	38
4.	Knowledge transfer	15	14	9	0	38
5.	Lecturer's overall performance	15	16	0	0	31
6.	Time management	14	10	3	0	27
7.	Meals	11	14	11	1	37
8.	Tea break	19	10	0	0	29
9.	Local Transportation	13	9	5	0	27
	<b>average</b>	<b>14</b>	<b>13</b>	<b>5</b>	<b>0</b>	<b>32</b>

Some pictures that captured the  
School moments

Inauguration by Prof. Dr. Francis O. Aduol  
Vice Chancellor, KTU

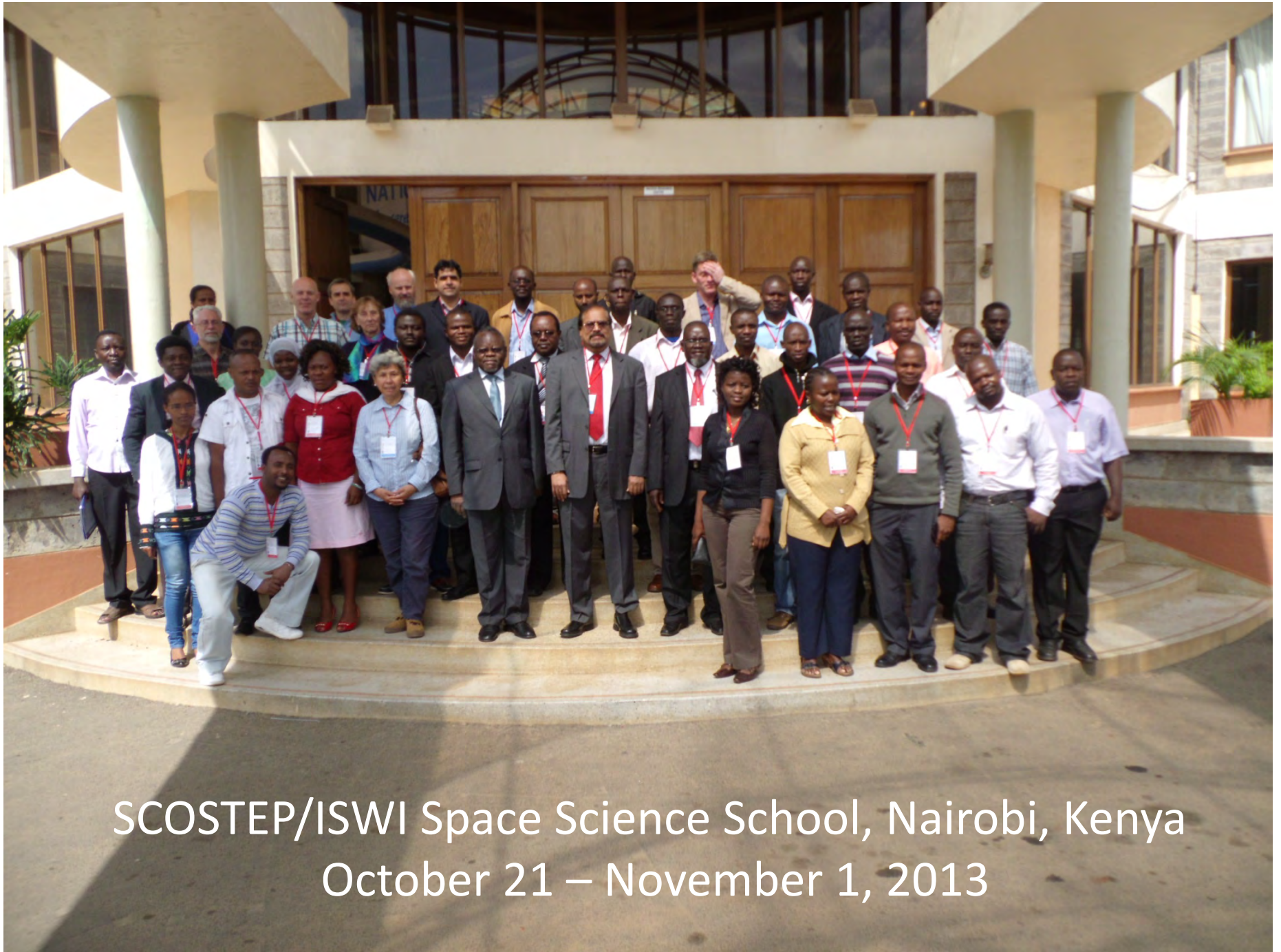




School Directors with the Vice Chancellor (left)

Opening session: C. Amory-Mazaudier addressing the audience





SCOSTEP/ISWI Space Science School, Nairobi, Kenya  
October 21 – November 1, 2013





Another group of lecturers and students



Discussion



Interaction during coffee break





Paul Baki teaching basis ionospheric physics



Babatunde Rabiou talking about equatorial ionosphere



Andrew Akala talking about data analysis







Franz-Josef Luebken explaining atmospheric Physics

An attentive class



Colette Abimana gave a seminar on " Advances of Space Science in Rwanda"



# Teachers Workshop

- The teachers workshop is to engage participants in hands-on activities so they can teach more effectively
- The teacher workshop on solar terrestrial relationship was combined with the astronomy teaching conducted by NASE (Network for Astronomy School Education). This is an activity by IAU Commission 46  
<http://www.iau.org/education/commission46/nase/>
- There were about 20 participants in the teacher workshop

Debbie Scherrer explains  
how to make a spectrograph  
during the teacher workshop





Dalmiro Maia with High School students