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)
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 Rabiu, 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. Rabiu, 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. Rabiu)
• 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

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<th>Activity</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
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<td>1. Delivery of the lectures</td>
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<td>2. The usage of multimedia system</td>
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<td>17</td>
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<td>3. Participants participation</td>
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<td>15</td>
<td>9</td>
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<td>4. Knowledge transfer</td>
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<td>5. Lecturer's overall performance</td>
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<td>6. Time management</td>
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<td>7. Meals</td>
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<td>14</td>
<td>11</td>
<td>1</td>
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<td>8. Tea break</td>
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<td>0</td>
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<td>9. Local Transportation</td>
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<td>9</td>
<td>5</td>
<td>0</td>
<td>27</td>
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<td><strong>average</strong></td>
<td>14</td>
<td>13</td>
<td>5</td>
<td>0</td>
<td>32</td>
</tr>
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</table>
Some pictures that captured the School moments
Inauguration by Prof. Dr. Francis O. Aduol
Vice Chancellor, KTU
Opening session: C. Amory-Mazaudier addressing the audience
Another group of lecturers and students
Interaction during coffee break
Paul Baki teaching basis ionospheric physics
Babatunde Rabiu talking about equatorial ionosphere
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/](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
Dalhmo Maia with High School students