



## CALLISTO status report/newsletter #83

### Updated CALLISTO station at University of Rwanda in Kigali

Between July 15 and 18 a PHYTHON workshop was held at hotel La Palisse in Kigali, Rwanda dealing with basics in reading and plotting different file formats like FITS, HDF5, XLS, CSV and TXT. Priority was set to read and plot FIT files from CALLISTO frequency agile solar radio spectrometer. In addition, on Monday 15th of July all CALLISTO related software was installed and configured to operate the instrument. And the LNA was exchanged by a model which is composed of extra protection circuitry and a waterproof case.



Fig. 1: The CALLISTO core team at University of Rwanda in front the fence with LPDA antenna. The new LNA at the top of the mast is connected with the LPDA by a very short coaxial cable to keep the noise temperature as low as possible. This LNA version is supplied with DC through the coax and by a Bias-Tee, so there is no extra cable required to provide dc-voltage. Contact person (right) is:

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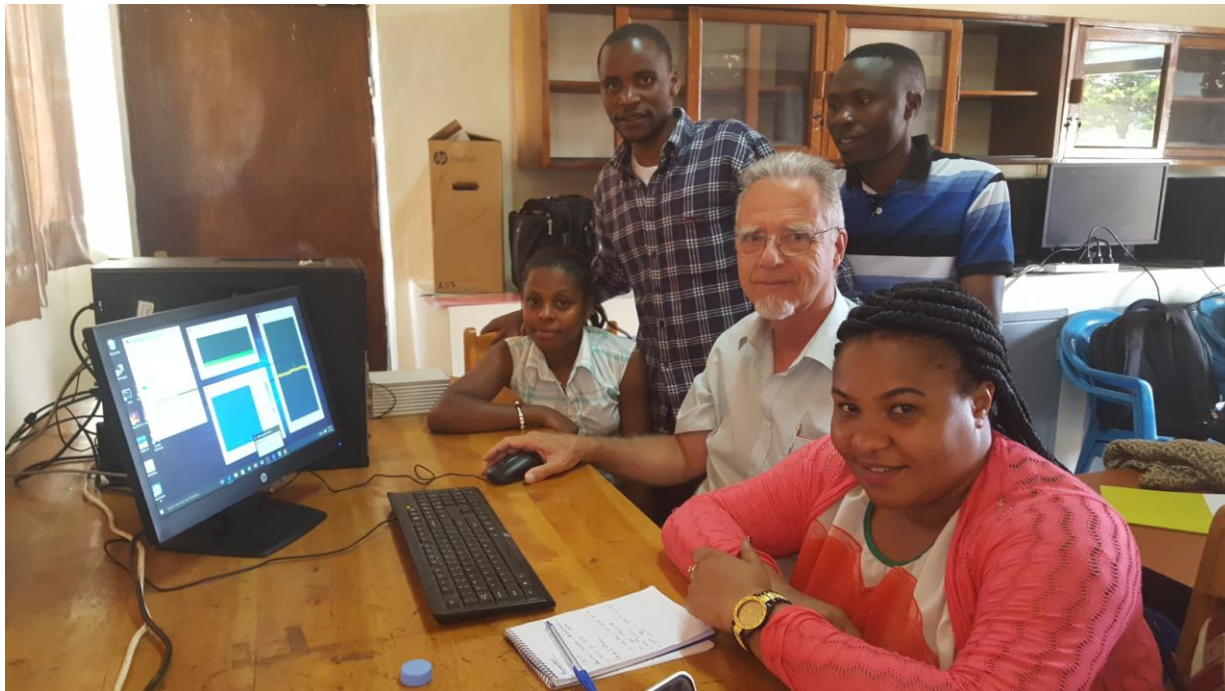


Fig. 2: CALLISTO core team in the CALLISTO laboratory during tests of the instrument.

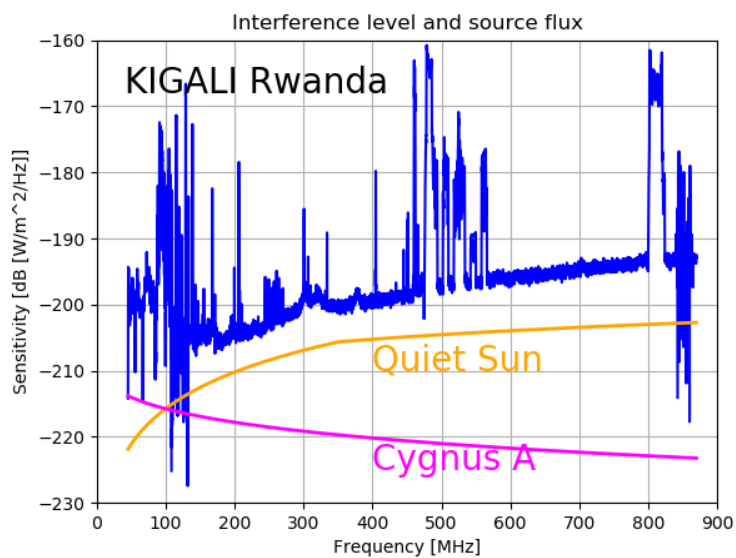
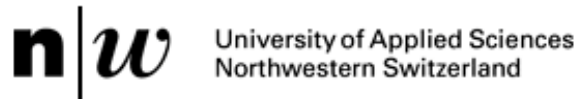


Fig. 3: Spectral overview 45 - 870 MHz at University of Rwanda.

Welcome back  
UR on the e-  
Callisto network



**Announcement by Dr. Nandita Srivastava, Professor and Deputy Head (Admin, Udaipur Solar Observatory Physical Research Laboratory, Badi Road, Dewali Udaipur-313001 (Rajasthan)**

### **Short Course on Space Weather**

Applications are now being invited for a short Course on Space Weather which will be conducted during 14-27 November, 2019 at Physical Research Laboratory (PRL), Ahmedabad, India under the auspices of the Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP), affiliated to the United Nations.

The proposed short course on Space Weather will describe the solar sources of space weather disturbances (i.e., solar flares, coronal mass ejections, solar energetic particles), and their effect on Near-Earth environment with possible disruptions to satellites, communication systems and human life, etc.

The prospective participants should possess a Master's degree in Physics/Astronomy/Astro-Physics/Solar Physics or other equivalent qualification relevant to Space and Atmospheric Science, OR Bachelor's degree in Engineering, (B.E./B. Tech.) in Electronics and allied fields / Environmental Science/Engineering. Candidates having teaching or research experience would be preferred. Candidates possessing higher qualifications viz. a Ph. D. would also be eligible for admission.

The course is for participants from the Asia-Pacific region only. The announcement brochure (containing details and the application form) can be downloaded from websites [www.cssteap.org](http://www.cssteap.org) and [www.prl.res.in](http://www.prl.res.in)

The Last date for receiving the application form is August 30, 2019.



## AOB

- IRSOL, the new station in south of Switzerland is now providing data on a regular basis. IRSOL is meant as the new core-station of the e-Callisto network, once the instruments at ETH Zurich will be shut down due to retirement of the PI.
- Instrument for Poland is ready for shipment.
- CALLISTO or Callisto denotes to the spectrometer itself while e-Callisto denotes to the worldwide network.
- General information and data access here: <http://e-callisto.org/>
- e-Callisto data are hosted at University of Applied Sciences, Institute for Data Science FHNW in Brugg/Windisch, Switzerland. Additionally, data are available at ESA site here: SSA Space Weather Portal (<http://swe.ssa.esa.int/>).
- In case you (as the responsible person for operating and maintenance of Callisto) are leaving the institute or, if you are retiring, please send me name and email address of the successor.



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