





CALLISTO status report/newsletter #91

New Station in Alexandria, Egypt

Recently a new spectro-polarimeter, based on LWA and CALLISTO has been installed and commissioned in Alexandria, Egypt. The host is Space Environment Research Lab (SERL), Institute of Basic and Applied Science (BAS) Egypt-Japan University of Science and Technology, New Borg El-Arab City, 21934 Alexandria, Egypt under lead of Prof. Ayman Mahrous.



Fig. 1: LWA on the roof of the University with ground mesh to improve beam pattern. Frequency range 10 MHz - 80 MHz.



Fig. 2: From left to right: 2 spectrometer CALLISTO, dual channel heterodyne up-converter, power supply and 90° quadrature hybrid to convert linear polarization into circular polarization, PC.



Fig. 3: Type III and type V solar radio burst observed with above instrument.

Welcome on the e-Callisto network

Callisto status report #91

Page: 2/5







CESRA NEWS

_____ _____ Statistics of Low Frequency Cutoffs for Type III Radio Bursts Observed by Parker Solar Probe during Its Encounters 1–5 by Bing Ma et al http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2948 _____ _____ Narrowband Spikes Observed during the 2013 November 7 Flare by M. Karlicky et al. http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2972 _____ Energy budget of plasma motions, heating, and electron acceleration in a three-loop solar flare by G. Motorina et al.* http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2967 _____ New treatment of gyroresonance and free-free radio emissions from multi-thermal multi-component plasma by A. Kuznetsov et al.* http://cesra.net/?p=2993 _____ New results on the direct observations of thermal radio emission from a solar coronal mass ejection by R. Ramesh et al.* http://www.astro.gla.ac.uk/users/eduard/cesra/?p=3008 **Ouasi-Periodic Particle Acceleration in a Solar Flare** by B. Clarke et al.* http://www.astro.gla.ac.uk/users/eduard/cesra/?p=3019 _____ _____ Langmuir wave motion observed in the most intense radio sources in the sky by H. Reid and E. Kontar https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3028 _____ _____

Papers with connections to e-Callisto:

https://doi.org/10.3847/1538-4357/abf435







AOB

- We got a new web-site with CALLISTO-related products here: <u>http://www.e-callisto.org/Products/Products.html</u>
- Another access to Callisto data here: <u>https://vwo.nasa.gov/</u> See also separate pdf



- I'm looking for those station which make use of external clock. Please send me a brief notice in case you use GPS or atomic clock as reference clock. We are interested in precise reference stations. Also need to know if your PC is locked to internet time-server.
- All IDL routines at server-level have now been replaced by Python scripts QuickViews, daily spectral overview and daily light curves
- CALLISTO or Callisto denotes to the spectrometer itself while e-Callisto denotes to the worldwide network.
- General information and data access here: <u>http://e-callisto.org/</u>
- 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 (<u>http://swe.ssa.esa.int/</u>).
- 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.







Please do **NOT** respond to the email-address of the list-server with which this document was distributed, it is a computer/robot. Respond instead directly to me either at: cmonstein(at)swissonline.ch or to: christian.monstein(at)irsol.usi.ch

If you do not want to receive this newsletter, please send me an email and I will take your address out of the database. On the other hand, if you think someone else might be interested in this kind of info, please let me know his/her emailaddress to be added to the database.

Christian Monstein Istituto Ricerche Solari Locarno (IRSOL) Via Patocchi 57 6605 Locarno Monti Switzerland email: christian.monstein(at)irsol.usi.ch