

CALLISTO status report/newsletter #76

New Callisto station in South Africa operational

Colleagues from SANSA moved the e-Callisto from HERMANUS (South Africa) to their observatory at Sutherland ($32^{\circ}22'46.9''\text{S}$ $20^{\circ}48'43.2''\text{E}$), where they think that the RFI conditions will be much more favourable than in Hermanus.

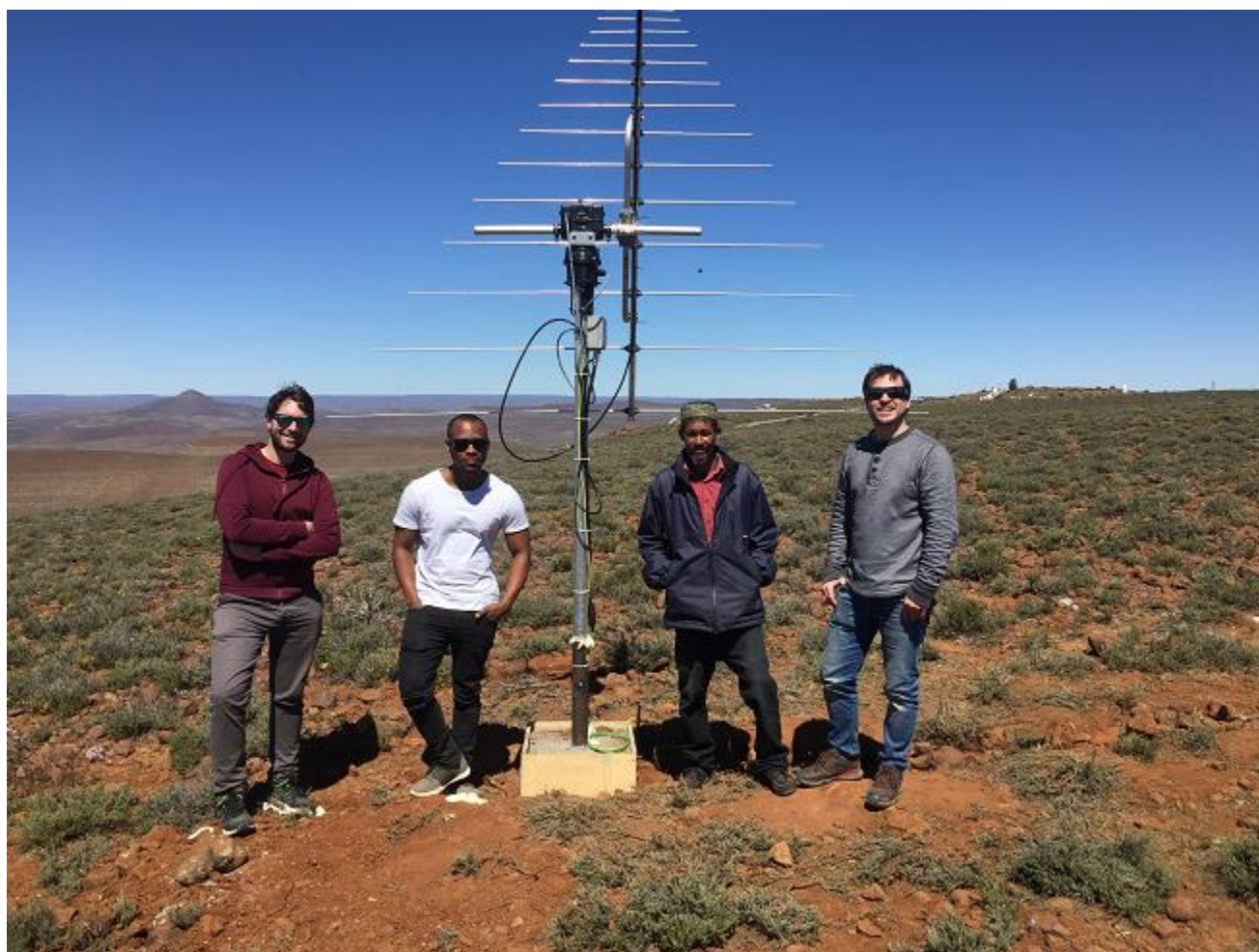


Fig. 1: LPDA and positioning system at Sutherland. The people in the photo are Joe Kinrade (Lancaster University), Kagiso Malepe (SANSA), Christopher Myburgh (SANSA) and Jonathan Ward (SANSA).



Fig. 2: Close up of LPDA, positioning system and frontend containing low noise amplifier.

Welcome SANSA on the e-Callisto network, an ISWI instrument array.

New Callisto station in Austria operational

Colleague Paul B. in cooperation with Fritz L. have just installed and configured a new CALLISTO at the private observatory of Paul in Krumbach, Austria. Currently they are experimenting with different antenna types to find the best configuration.

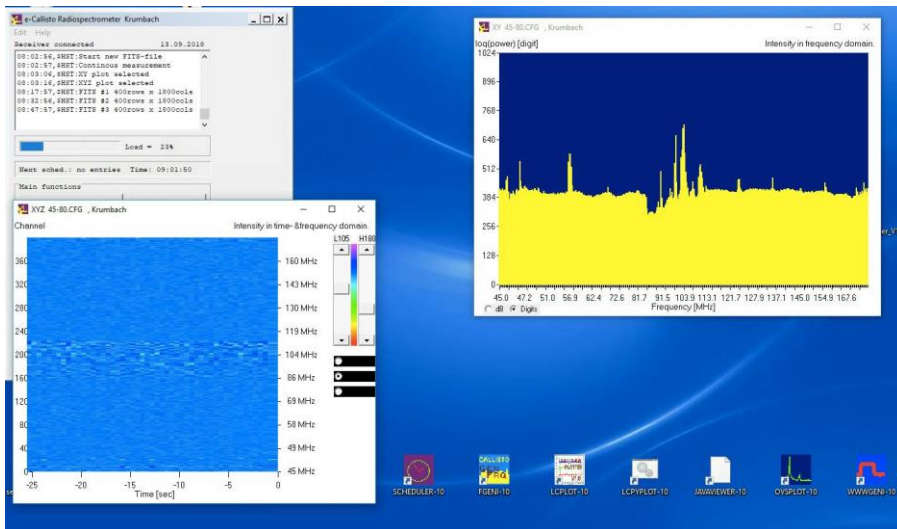


Fig. 3: Screenshot of CALLISTO application, taken from Facebook (Fritz&Paul)



Fig. 4: Simple dipole to observe low frequency radiation from the Sun, taken from Facebook (Fritz&Paul)

Welcome Paul on the e-Callisto network, an ISWI instrument array.

New Callisto station in Nashik/India operational

Maratha Vidya Prasarak Samaj's K.R.T. Arts, B.H. Commerce and A.M. Science (KTHM) College, Nashik, established in 1969 and affiliated to Savitribai Phule Pune University (SPPU), Pune, Maharashtra (India). The college offers degree in Arts, Humanities, Commerce, Science, Business Administration and Computer Science. The college provides education in 29 subjects at Degree level, 24 subjects in Post Graduate Level, M.Phil. in 10 subjects, Ph.D. in 11 subjects. The college was accredited by National Assessment and Accreditation Council (NAAC) with 'A' grade by 2004, re-accredited with 'A' grade CGPA 3.30 in 2011 and with 'A++' grade CGPA 3.79 in 2017 by securing first position in Maharashtra (India). The University Grants Commission (UGC) has granted a status of 'College with Potential for Excellence (CPE)' to the college.

The CALLISTO station is established at the Department of Electronic Science, under the observation of Prof. V.S. Kale and research student Mr. Dnyandev B. Patil. The e-CALLISTO installation is shown with the photographs 7...8.



Fig. 7: LPDA at KTHM in Nashik, India.



Fig. 8: Prof. V.S. Kale and research student Mr. Dnyandev B. Patil.

**Welcome KTHM, Nashik on the e-Callisto network,
an ISWI instrument array.**

Updated Callisto station in Muhen, Switzerland operational



Fig. 5: LWA from Peter H. in Muhen has been moved to the roof of the garage.

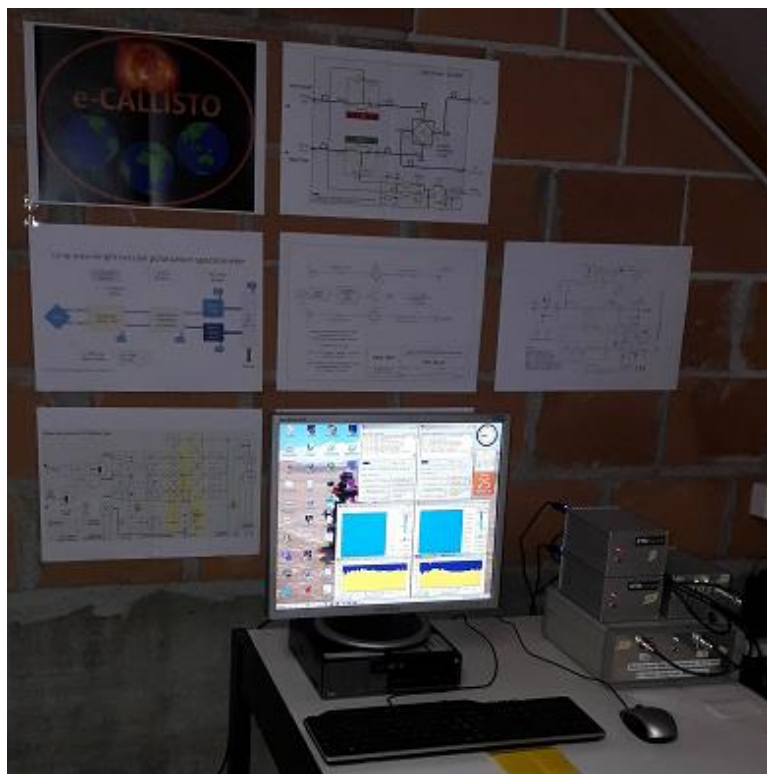


Fig. 6: 90° Hybrid coupler, heterodyne converter and 2 CALLISTO in the private observatory of Peter.

Welcome again Peter on the e-Callisto network, an ISWI instrument.

CESRA news

An Extreme-ultraviolet Wave Generating Upward Secondary Waves in a Streamer-like Solar Structure

by Ruisheng Zheng et al.*

<http://cesra.net/?p=1925>

Decimetric emission 500 arc seconds away from a flaring site: Possible scenarios from GMRT solar radio observations by Bisoi et al.*

<http://cesra.net/?p=1960>

Size distributions of solar proton events and their associated soft X-ray flares

based on the maximum likelihood estimator

by E.W. Cliver and E. D'Huys

<http://cesra.net/?p=1971>

We are pleased to announce that the next CESRA Workshop, "CESRA2019: The Sun and the inner heliosphere"

will be held on July 8th - 12th, 2019, at Telegrafenberg, Potsdam, Germany.

<http://meetings.aip.de/cesra2019/>

Modulation of radio emission, fast magneto acoustic waves and magnetic field measurements in the solar corona with LOFAR

by Kolotkov et al*

<http://cesra.net/?p=1954>

Research Scientist I (step 3)/Center for Space Plasma & Aeronomic Research/RV4230

<https://uah.interviewexchange.com/jobofferdetails.jsp?JOBID=102235>

Senior Lecturer/Lecturer in Solar and Heliospheric Physics

<https://www.jobs.ac.uk/job/BMI789/senior-lecturer-lecturer-in-solar-and-heliospheric-physics>

Subra Ananthakrishnan and his colleagues are hosting the URSI Asia Pacific Radio Science Conference in New Delhi during March 9 - 15, 2019. The details of the APRASC are online:

<http://www.aprasc2019.com>



AOB

- I am retiring today after 21 year at the institute of Astronomy, ETH Zurich. However, after a few weeks of vacation in India and Nepal, I will continue working at the new Institute for Particle Physics and Astrophysics, ETH Zurich on a 20% contract. All activities related to Callisto I will follow up as a private person in my own high frequency laboratory.
- End of August 2018 we had a very successful PYTHON workshop at Ethiopian Space Science and Technology Institute (ESSTI), Entoto Observatory Research Center (EORC), Department of Space Science and Applications Research Development in Addis Ababa.
- October 2-6, I'll be with Bhuwan Joshi in Udaipur, India to install a new CALLISTO
- October 22-25 I'll be with Suman Gautam in Pokahra, Nepal to install a new CALLISTO
- A nice article: <https://www.nytimes.com/2018/08/29/obituaries/ruby-payne-scott-overlooked.html>
- Links for LPDA design:
 - <http://www.changpuak.ch/electronics/lpda.php>
 - <http://www.stroobandt.com/lpda/en/index.html>
- 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 Fachhochschule Nordwestschweiz (University of applied sciences FHNW) in Brugg/Windisch, Switzerland. Process control, user communication and scripts are conducted at *Institute for Particle Physics and Astrophysics (IPA)*, ETH Zurich.

Please do **not** respond to the email-address of the list-server, it is a computer.
Respond instead directly to me monstein@astro.phys.ethz.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 email-address to be added to the database.

Christian Monstein, Institute for Particle Physics and Astrophysics (IPA), ETH Zurich, Switzerland.
monstein@astro.phys.ethz.ch