



University of Applied Sciences
Northwestern Switzerland



# CALLISTO status report/newsletter #84

### New station in Grotniki, Poland

On August 30, 2019 a new station has been installed and set into operation in Grotniki, Poland. The antenna is a simple G5RV: 20-10m, covering frequency range from 5 MHz up to 53 MHz. To cope with native frequency range of Callisto (45 MHz - 870) a heterodyne up-converter has been switched in-between antenna and Callisto. Callisto application is a LINUX-version, running on 2nd hand LINUX-computer. Data transfer is not yet



automatic due to missing internetconnection. Internet access will be provide later this year via glass fibre. For testing some files have already been uploaded with mobile phone hotspot.

Fig. 1: The antenna G5RV has been installed between two trees about 4m above ground in east-west direction.

Welcome Poland on the e-Callisto network

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### New station in Landschlacht, Switzerland

Recently a new station has been installed and set up in Landschlacht, north-east of Switzerland. Instrument has been moved from <u>Bleien</u> to Landschlacht because I'm getting retired and cannot take care about the instrument at Bleien any-more. In addition, interference level has been increased in Bleien which was another reason to move the instrument to Landschlacht to private properties.



Fig. 2: Preparation of a ditch for the tube carrying the coaxial cable for the LWA. Thanks to Max for all the ground work required for electrical power and rf-cabling.

Red tube is carrying two coaxial cables, one per linear polarization from the LWA. Coaxial cable are also used to supply the LWA with dc-power 15 volts.









Fig. 3: Long Wavelength Antenna (LWA) on private property in Landschlacht. Wooden shed in the background hosts 90° quadrature hybrids, power supplies, spectrometers, converters and computer.

# Welcome Landschlacht on the e-Callisto network

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Fig. 4: Example on how to install a frontend between antenna and Callisto. Here in this example at IRSOL in Switzerland antenna is directly connected to Callisto due to high level of local rfi. But there is enough space in the box to install a low noise amplifier in the future. Congratulations for this nice example to: Mari Gianpaolo, collaboratore tecnico, <a href="IRSOL">IRSOL</a>, <a href="gpmari(at)irsol.ch">gpmari(at)irsol.ch</a>, Istituto Ricerche Solari, Via Patocchi 57, 6605 Locarno Monti. See also the nice cable flanges at the bottom and a similar one at the top. Many thanks, Gianpaolo!







## **CESRA NEWS**

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Localized Microwave and EUV Bright Structures in an Eruptive Prominence by J. Huang et al.\*

http://cesra.net/?p=2291

Solar Physics with the Square Kilometre Array

by A. Nindos et al.\*

http://cesra.net/?p=2295

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Direct Observations of Traveling Ionospheric Disturbances as ?Focusers of Solar Radiation: Spectral Caustics

by A. Koval et al\*

http://cesra.net/?p=2323

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# **PAPERS**

Automated Detection of Solar Radio Bursts Using a Statistical Method

Dayal Singh, K. Sasikumar Raja, Prasad Subramanian, R. Ramesh, Christian Monstein

Solar Phys (2019) 294:112

https://doi.org/10.1007/s11207-019-1500-0

https://link.springer.com/epdf/10.1007/s11207-019-1500-

 $\underline{0?author\_access\_token=PHM4V3f3YwlTO75SWnfAeve4RwlQNchNByi7wbcMAY6gQINqJkyfpX74d}\\ \underline{2P43gBb2hlY318P2WplFf13O6X2GZgk6PgoaqS-}$ 

hxzCWYTw8CnWWkNzjv1W2GmkEKXhYc2xMIL uXFuVklUuzDfPIkLbw%3D%3D

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#### **AOB**

• 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.



- CALLISTO or Callisto denotes to the spectrometer itself while e-Callisto denotes to the worldwide network.
- General information and data access here: <a href="http://e-callisto.org/">http://e-callisto.org/</a>
- 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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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.

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