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* * ISWI =	International Space Weather	* Initiative *
*	(www.iswi-secretariat	z.org) *
<pre>* Publisher: Pro * Editor-in-Chief: Mr.</pre>	fessor K. Yumoto, ICSWSE, Kyu George Maeda, ICSWSE (maeda)	ushu University, Japan * [at]serc.kyushu-u.ac.jp)*
* Archive location: www * [click on	.iswi-secretariat.org (maint "Publication" tab, then on "N	value of the second sec
* Caveat: Under the Gr * the ISWI New	ound Rules of ISWI, if you us sletter or Website, however m	se any material from * ninor it may seem *
* to you, you *******************************	must give proper credit to th ************************************	10 original source. *
Attachment(s): (1) "2013 SARA Wesern R (2) "2013 SARA Western (3) "Report on the Join . 1.5 MB pdf, 5 page	egional Conf Announc", 208 KH Regional Conf Call for Papers t Space Weather Summer Camp 2 s.	3 pdf, one page. 5″, 80 KB, one page. 2012_v1″,
:	Re:	
:	(1) 2013 SARA Western Regiona(2) Message from "Sun and Geo	al Conference osphere″ (journal)
:	(3) US-Germany Space Weather	Summer Camp Report
Dear ISWI Participant:		
There are three items t	oday:	
(1) There are two attached Radio Astronomers." Th	(pdf) files from SARA, "Socie ey concern a conference annou	ety of Amateur incement.
(2) The following message i	s from Katya GEORGIEVA	
(Associate Editor-in-Ch . Issues No.1 and No	ief of "Sun and Geosphere") : .2 of Volume 7 of the journal	: L
. "Sun and Geosphere . Black Sea and Casp	″ (published by the Balkan, ian Sea Regional Network on	
. Space Weather Stud	ies) are already online.	
. manuscripts at h . 18 Sept 2012.	ttp://www.shao.az/SG/ End of Message.	
(2)	0	
(3) Finally, please find at	tached	
"Report on the Joint US	-Germany Space Weather Summer	c Camp 2012".

Faithfully forever yours,

so that the entire ISWI community can see what kinds of

activities are occurring here and there.

- : George Maeda
- : The Editor
- : ISWI Newsletter

2013 SARA Western Regional Conference to be Held at

Socorro, New Mexico, USA

The 2013 SARA Western Regional Conference will be held at Best Western Socorro Hotel & Suites in New Mexico on Saturday and Sunday, February 9 and 10, 2013. We will have a tour of the Very Large Array (VLA) site west of Socorro. In addition to presentations by SARA members, we plan to have speakers from the National Radio Astronomy Observatory Array Operations Center (NRAO AOC) in Socorro. Additional details will be published online and in the SARA journal as we get closer to the conference date. Register now to avoid the rush and to guarantee a seat at the conference.

<u>VLA site tour</u>: The Very Large Array consists of 27 parabolic dish reflector antennas in a Y-shaped configuration on the Plains of San Agustin approximately fifty miles west of Socorro: <u>http://www.vla.nrao.edu/</u>. Each antenna is 25 m in diameter (image, upper-right). The data from the antennas is combined electronically to give a resolution equivalent to an antenna 36 km across, with the sensitivity of a dish 130 m in diameter. The array has been undergoing an expansion project called the EVLA, or Expanded VLA. The facility also is the home of the Long Wavelength Array (LWA): <u>http://www.phys.unm.edu/~lwa/index.html</u>. The LWA uses many inexpensive antennas to provide a very large aperture. The LWA is designed to probe the depths of space at relatively low frequencies between 10 and 88 MHz. There are 256 antennas in an antenna station and each is a drooping dual-dipole about 1.5 m high and 2.7 m across (image, lower-right).

<u>**Contact</u>**: Please contact conference coordinator Whit Reeve if you have any questions about the conference or if you would like to help: westernconference@radio-astronomy.org. Website: www.radio-astronomy.org</u>

Presentations and proceedings: Papers and presentations on radio astronomy hardware, software, education, research strategies, philosophy, and observing efforts and methods are welcome. The deadline for submitting a letter of intent to the conference coordinator including a proposed title and informal abstract or outline is 1 December 2012. Formal proceedings will be published for this conference. If presenters want to submit a paper or a copy of their presentation, we can make them available to attendees on a CD.

Registration: Registration for the 2013 Western Regional Conference is just US\$50.00. This includes breakfast and lunch on Saturday and Sunday. Payment can be made by going to <u>www.paypal.com</u> and directing payment to <u>treasurer@radio-astronomy.org</u>. Please include in comments that the payment is for the Western Regional Conference. You also can mail a check to SARA, 2189 Redwood Ave, Washington, IA 52353 USA. Please include an e-mail address so a confirmation can be sent to you upon receipt of payment.

Hotel reservations: To reserve rooms at the Best Western Socorro Hotel & Suites call the hotel directly at +1 575-838-0556 and ask for SARA rate (pick-up No. 99839-99850). Rates are US\$86.24 for single and US\$97.44 for double occupancy. Please note that you cannot get the special rate by internet or by calling the toll-free 800 number to Best Western. When you call, do not press "1" for reservations – that will take you to the 800 call center. The address of the hotel is: 1100 N California Street, Socorro, New Mexico 87801-4266. Website: http://bestwesternnewmexico.com/hotels/best-western-socorro-hotel-and-suites .

<u>Saturday night dinner</u>: We will make a group dinner reservation at a local restaurant for Saturday night. Please let us know before 1 January if you plan to attend this dinner so we can include you in the reservations. Send an email to: <u>westernconference@radio-astronomy.org</u>.









Call for Papers 2013 SARA Western Regional Conference Socorro, New Mexico, USA



The Society of Amateur Radio Astronomers (SARA) hereby solicits papers for presentation at its 2013 Western Regional Conference, to be held February 9 through February 10, 2013, at Best Western Socorro Hotel & Suites at Socorro, New Mexico. Papers on radio astronomy hardware, software, education, research strategies, observations and philosophy are welcome. SARA members or supporters wishing to present a paper should email a letter of intent, including a proposed title and informal abstract or outline to <u>westernconference@radio-astronomy.org</u> no later than 1 December 2012 (please let us know if you require more time). Be sure to include your full name, affiliation, postal address, and email address, and indicate your willingness to attend the conference to present your paper. Submitters will receive an email response, typically within one week. Formal printed Proceedings will be published for this conference and all presentations can be made available on CD. Website: <u>www.radio-astronomy.org</u> Report on the Joint US-Germany Space Weather Summer Camp 2012

N. Jakowski and H. Barkmann German Aerospace Center (DLR)

e-mail: Norbert.Jakowski@dlr.de, Henrike.Barkmann@dlr.de

The second Joint Space Weather Summer Camp of UA Huntsville, the German Aerospace Center and the University of Rostock started at the University of Alabama Huntsville, Center for Space Plasma and Aeronomic Research (CSPAR), on 8th July 2012. Over the course of four weeks until 5th August, ten UA Huntsville and ten German undergraduate and graduate students got an introduction to mostly all aspects of space weather at various Space Weather monitoring and research facilities in Mecklenburg-Vorpommern /Germany and US.

The lectures at the UAH focused on the physics background of space weather. The lessons and the project work covered in particular solar and magnetospheric physics.

A great event for the students was the visit of the NOAA Space Weather Prediction Center (SWPC) in Boulder. The SWPC is part of the US National Weather Service and has been the official source of US space weather alerts, watches, warnings, and forecasts of space weather storms for nearly 60 years. The students were impressed to see how space weather forecasters handle the huge and complex data sets from ground and space measurements to predict the behavior of the space environment permanently on 24 hours per day, 365 days per year basis.



Figure 1: Students and lecturers at the NOAA Space Weather Prediction Center, Boulder, CO Photo: NOAA-SWPC

Although automatic routines help to analyse the tremendous data sets, human forecasters are still needed in a space weather service as provided by SWPC.

Besides listening to lecturers and discussing hot topics the students could taste scientific work during their project work hours. As a result of project work they prepared posters which nicely demonstrate their improved understanding of space weather phenomena.

After arriving in Germany, the Space Weather Summer Camp started in Neustrelitz with talks and project work focused on monitoring and modeling of the ionosphere and on the radiation environment of the Earth.



Figure 2: Students and lecturers at the antenna field of DLR site Neustrelitz just in front of the ACE antenna for receiving data from the Advanced Composition Explorer (ACE) satellite operated by NOAA for monitoring key parameters of the solar wind. Photo: DLR Neustrelitz

At the Institute of Atmospheric Physics (IAP) at the University of Rostock the students learned about the solar control and dynamics of the middle atmosphere and observation techniques and launched a balloon to measure atmospheric parameters. The working day finished by a Baltic sea beach party in a very relaxed atmosphere.

After visiting the University of Rostock the students returned to Neustrelitz to continue the projects and to hear more about ionosphere monitoring and modeling. They were introduced into the principles and techniques of the Space Weather Application Center – lonosphere (SWACI). This data center provides ionospheric information and data to users to mitigate the ionospheric propagation delays and other refraction effects (http://swaciweb.dlr.de).



Figure 3: Students and lecturers at the Institute of Atmospheric Physics, Kühlungsborn. Students launch a balloon for sounding atmospheric key parameters. Photo: Andreas Schneider

With great enthusiasm the students built two VLF receivers developed in the DLR Project_Lab Neustrelitz for the students project SOFIE (Solar Flares detected by Ionospheric Effects - <u>http://swaciwebdevelop.dlr.de/menutop/home/</u>). During their final presentations at the end of the Summer Camp they were proud on being able to show first records of the self-made receivers. Both receivers will be sent to Huntsville where solar flares shall be detected at the UAH and at an interested school in Huntsville. This is a valuable

contribution to further enhance collaboration between UAH and DLR but also between schools in Huntsville and Mecklenburg-Vorpommern.



Figure 4: Project work: "Mounting a SOFIE receiver in the DLR Project_Lab Neustrelitz". Conductor plate of the SOFIE receiver and the students technician team showing the receiver box. Photo: Henrike Wilms, Andreas Schneider

Besides the scientific program the students visited the old hanseatic city Rostock and Germany's capital Berlin. A highlight was the visit of the Historical-Technical Museum in

Peenemuende where the first launch of a missile into space took place here in October 1942.

The feedback of the participants was overwhelmingly positive, confirming that the decision was right to organize a second Space Weather Summer Camp in 2012. Now we are looking forward to the third Space weather Summer Camp planned to be organized by UAH and DLR in 2013.

