poster

44th SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The Next Steps (A4) Interactive Presentations (IP)

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PRELIMINARY OSETI ACTIVITIES AT FOAM13 OBSERVATORY (ITALY)

Abstract

The Italian Optical SETI (OSETI) program has been inspired by the similar, pioneering OSETI activities at UC Berkeley, Harvard and Princeton. Based on a high-speed triple PMT scheme with coincidence detection to avoid false positives (cosmic rays, etc.), it is now running at the FOAM13 Foundation Observatory near Tradate (Varese), Italy. The hardware had to be as simple and cheap as possible, typically within the financial capabilities of both small and medium-scale astronomical observatories. This led us to select a very fast rise-time PMTs from Hamamatsu, plus of a Wavesurfer 104MXs-B Teledyne-Le Croy sampling oscilloscope for signal acquisition and pre-processing functions. Also, our final goal would be to become an OSETI coordinating center for several observatories via the Internet: a dedicated software will thus have to be developed to take care of data collection and sharing, and to implement the necessary post-processing algorithms. Finally, the Kepler mission exoplanets are our current OSETI targets.

It is to be added that the 6th IAA Symposium on the Search for Life Signatures, held in Paris on March 26-27, 2015, has given several FOAM13 astronomers the possibility to meet with their OSETI colleagues from different countries in different continents. This international exchange of ideas about OSETI can only be of help to further develop the creation of a truly international OSETI Community.