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# ***E-LOFAR in Italy***

**Science:**

## ***Widespread national interest***

*June 2008: Meeting held in Bologna & Medicina (55 participants)  
from more than a dozen of institutes/universities*

**Topics:**

*from solar science and pulsars to EoR and Cosmology*

**Outcome:**

*WP of the Italian astronomical community*

*E-LOFAR practical activities:  
Testing at Medicina:*

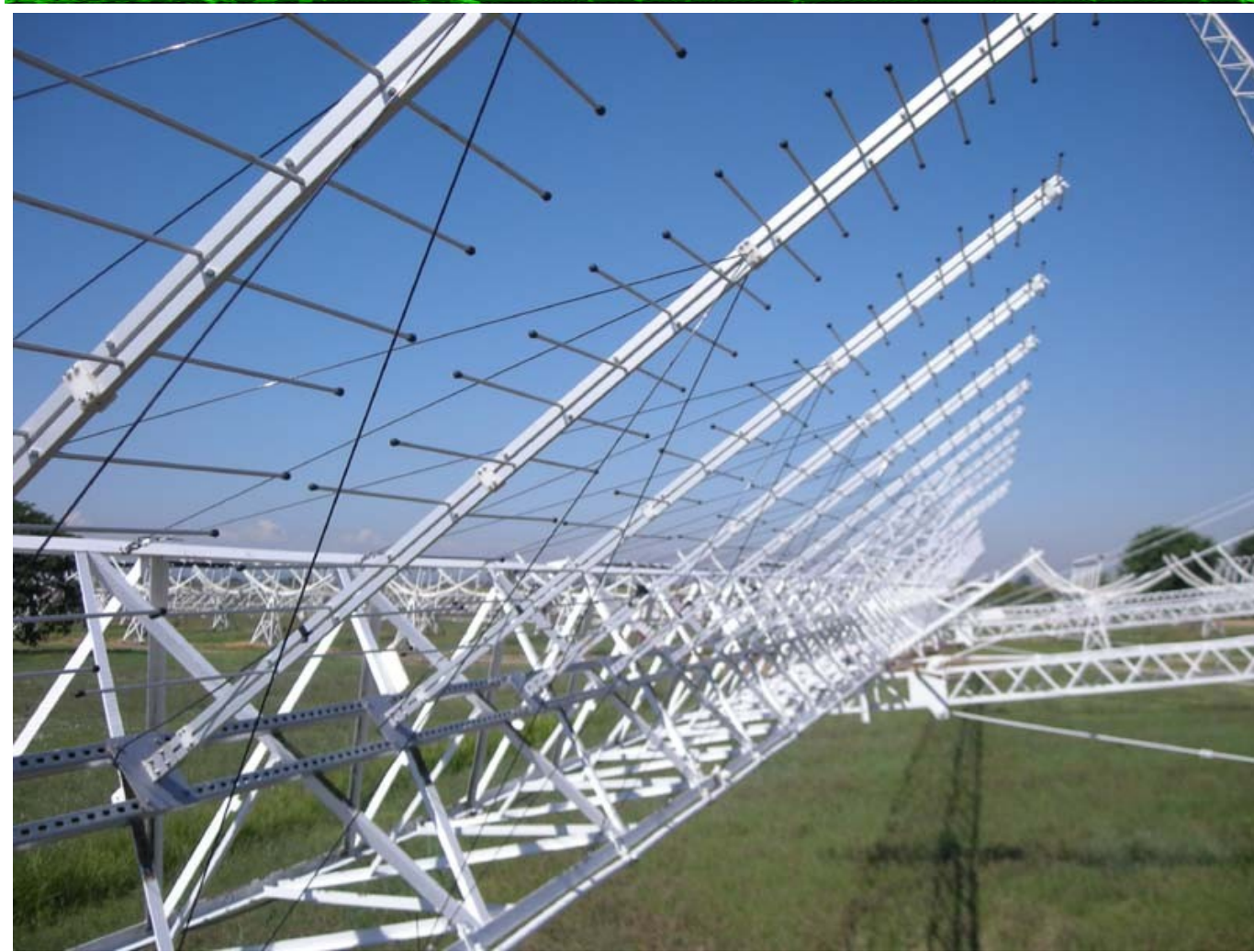
*Funded by:*

*University of Bologna*

*IRA – INAF*

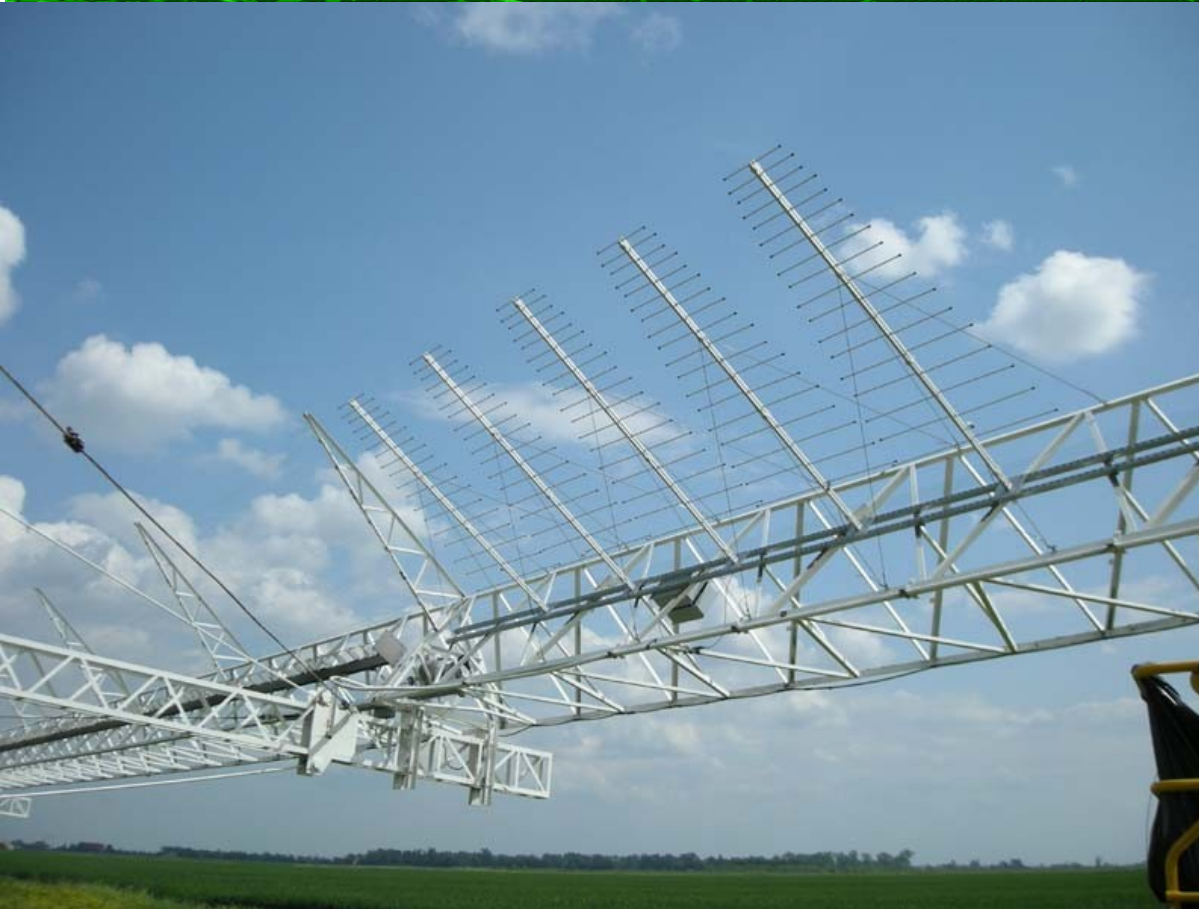
*Fondazione Cassa di Risparmio Bologna*

*E-LOFAR practical activities:*  
**Testing at Medicina:**



*A portion (800 m<sup>2</sup>) of the Northern Cross has been refurbished with a new wide-band receiving system*

*14 (out of 16) receivers will operate in the HBA frequency range*

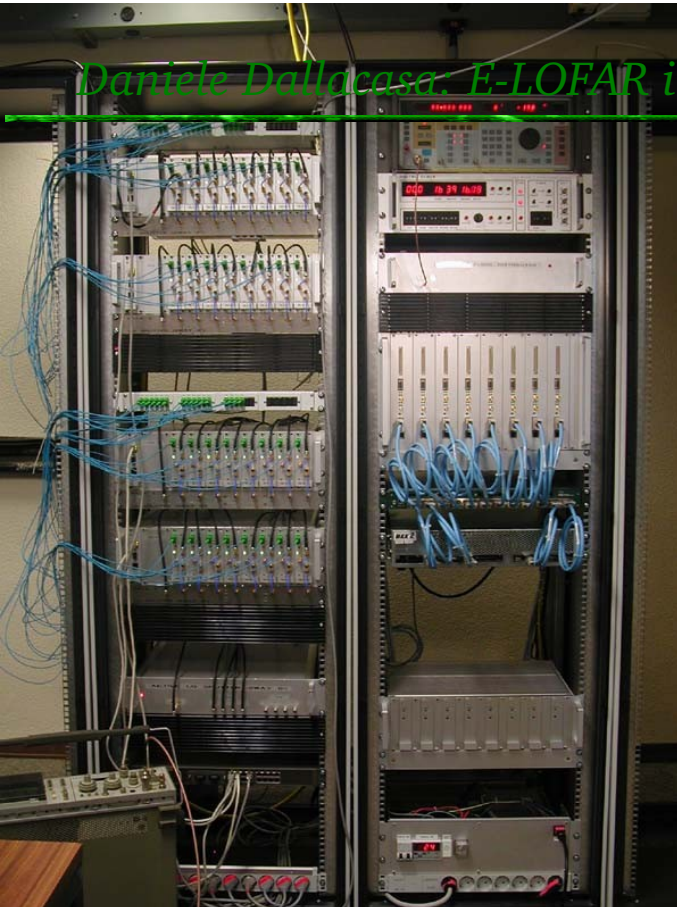


*E-LOFAR practical activities:*  
**Testing at Medicina:**

– *HB interferometric test:*  
(under agreement/being arranged)

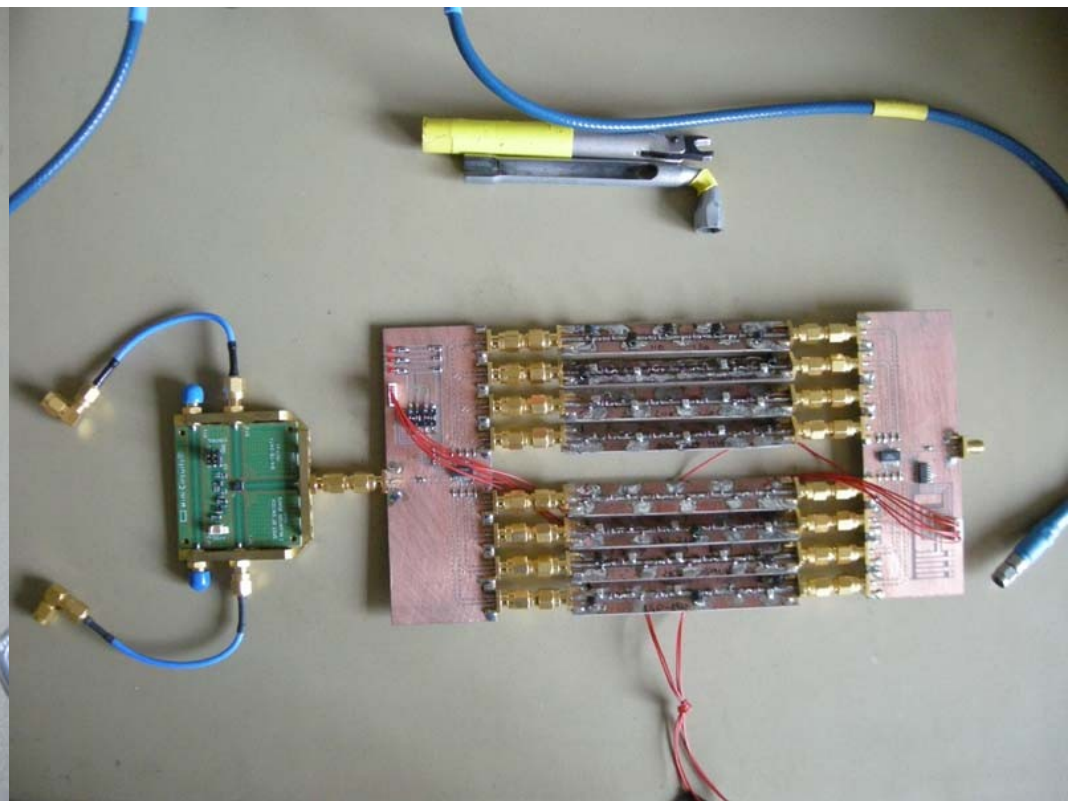
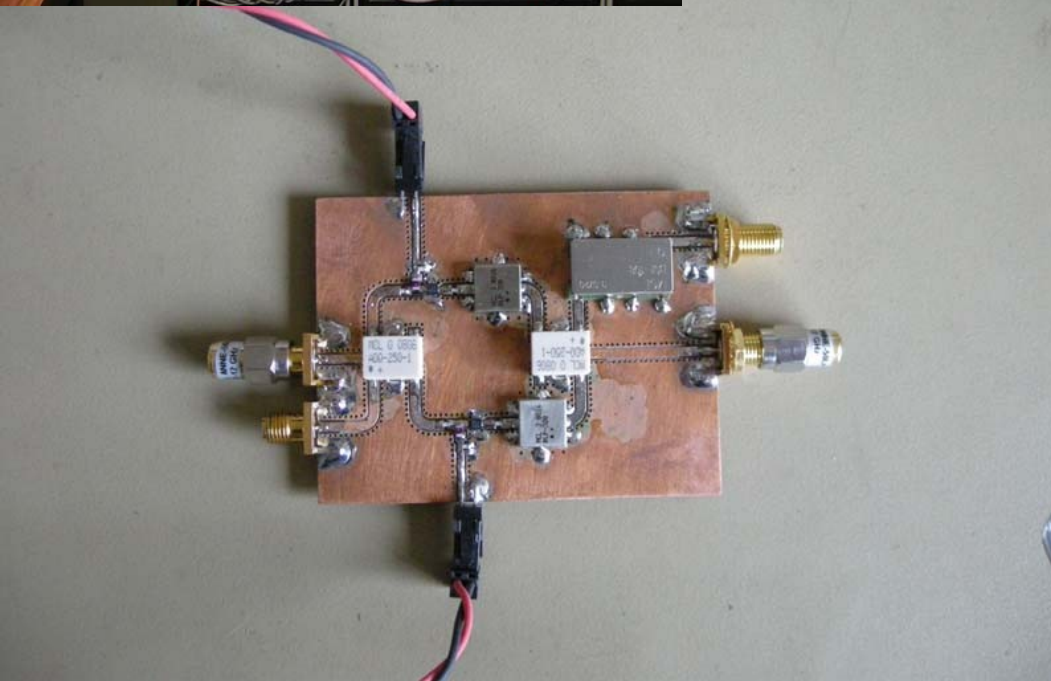
*Exloo – Medicina baseline, november 2008*

- + *fiber connection & plenty of ground are available*
- + *much larger collecting area is potentially available*
- *different antenna design and performance (FoV, station beam) wrt standard LOFAR station*
- *NC steerable in DEC only (electric pointing in R.A. potentially available with some efficiency loss, single beam)*



*E-LOFAR practical activities:  
Testing at Medicina:*

*Hardware ready shortly  
Software under development*



*(Italian) E-LOFAR future perspective:*

*Current plan:*

*Demonstrate feasibility (Medicina – Exloo) (i.e. we can manage and understand it...)*

*Get funds for ONE standard LOFAR Station*

*(to be deployed in Medicina)*

*If funds eventually allocated will be enough, buy a second station (by SRT site), consider a “super – station” ...*

*(Italian) E-LOFAR future perspective:*

*MIUR (MEUR) roadmap of future ground based astronomical instrumentation:*

***E-LOFAR is present (together with SKA, good!)  
and well rated (excellent!)***

*October 20,21: INAF SC and AC will meet IRA at Bologna aiming to define/find  
“priorities” among “projects” to be pursued by Italian Radio Astronomy  
(within INAF)*

***No funds allocated to LOFAR at the moment***



*E-LOFAR future perspective:*



*(...are Italian milestones to LOFAR heavier?)*

*Conclusions:*

*(...are Italian milestones to LOFAR heavier?)* **YES, they are!**



*but we are hardly working to get it!*

*(to be continued)*