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LLAMA **PROJECT**

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The project LLAMA**, acronym of** *Long Latin American Millimetre Array* **is very briefly described in this paper. This project is a joint scientific and technological undertaking of Argentina and Brazil on the basis of an equal investment share, whose mail goal is both to install and to operate an observing facility capable of exploring the Universe at millimetre and sub/millimetre wavelengths. This facility will be erected in the argentinean province of Salta, in a site located at 4830m above sea level.**

LLAMA, that stands for *Long Latin American Millimetre Array*, is a joint scientific and technological undertaking of Argentina and Brazil on the basis of an equal investment share, whose mail goal is both to operate an observing facility at millimeter and sub/millimetre wavelengths. Beyond any doubt this facility will open up a new horizon for the radioastronomy of both countries.

LLAMA will be very similar at the APEX facility in the sense that will have both a Cassegrain and Nasmyth foci.

Along the construction phase, that will start early 2014, the finding agencies are the Ministery of Science, Technology and Innovative Production from the argentinean counterpart, and FAPESP from Brazil.

The site selected for erecting the new observatory is located in the northwestern argentinean province of Salta, at an altitude of 4830 m above sea level. This location is about 20 km, in straight line, from the town of San Antonio de los Cobres ($\sim$ 5000 inhabitants), and about 180 km to the south-southeast of the place where both ALMA and the single dishes of APEX and ASTE are located.

The instrument will be able to carry out observations in two modes, namely: *a)* the stand alone mode, and *b)* the VLBI mode. In the first mode it will observed as a radiometer on its own, whilst in the second one it may be, together with ALMA, APEX, and/or ASTE part of a local VLBI network. In the former mode it will achieve an angular resolution of 21 arcsec at 300 GHz, whilst in its "VLBI mode" it may reach an angular resolution of 1 mas at a wavelenght of 1 mm (300 GHz). In this last mode it may increased the algular resolution of ALMA by an order of magnitude.

The site's mean atmospheric opacity at 210 GHz is in between 0.07 and 0.12 from March till November, and increases along the other months as a consequence of the so-called "Bolivian winter". Along the last three years there is no record of snow or hail. The wind comes mostly from the west and the data gathered along a three years period shows that it has a wind speed mode of $\sim$3.5 ms^{-1}. Around 96% of the time the wind speed is below 15 ms^{-1}, the upper limit to carry out observations.

The construction of the site needed infrastructure (access road, energy, connectivity, etc) will start along 2014.

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