This proposal has not been submitted before.

Proposal Title: Test detection of the Mars Express UHF signal with the Arecibo telescope

ABSTRACT:
The aim of the test is a verification of a possibility of “eavesdropping” on the lander-orbiter radio communication for the ESA’s ExoMars mission. The test can be conducted currently with the ESA’s operational Mars orbiter Mars Express (MEX). Due to various ballistic and operational limitations of the MEX mission on one hand, and Arecibo sky visibility limitations on the other hand, in the coming ∼10 months, the test can be conducted with the MEX UHF signal only during one of the following timeslots (reception time): 2013 DoY326 = Friday 22 Nov 2013, 11:00-12:30 UTC or 2013 DoY329 = Monday 25 Nov 2013, 11:00-12:30 UTC

<table>
<thead>
<tr>
<th>Name</th>
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<th>Student</th>
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<tbody>
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</tr>
</tbody>
</table>

Remote Observing Request

☐ Observer will travel to AO
☐ Remote Observing
☒ In Absentia (instructions to operator)

Instrument Setup

430 G

Atmospheric Observation Instruments:

Special Equipment or setup: The data should be registered on a standard VLBI Mk5 system for further analysis at JIVE. A parallel use of any other available at Arecibo data acquisition and analysis system is possible.
RFI Considerations

Frequency Ranges Planned

433-441