



Exoplanets: challenge for Low Frequency Radioastronomy at Moon.

M. Mogilevsky, A. Skalsky, L. Zeleniy, V. Nazarov, R. Nazirov, O. Batanov, T. Romantsova, and A. Sadovski
Space Research Institute, Space Plasma Physics Department, Moscow, Russian Federation (skalsky@iki.rssi.ru)

The conducting ionosphere of Earth completely shields radioemissions coming from outer space and propagating at frequencies below a few MHz. In contrary, the Moon possessing a weak atmosphere around its surface seems to be a perfect base for carrying out measurements of low frequency radio emissions originated from the space. The most intriguing objective is a search of terrestrial-like planets in the exosolar system, i.e. planets possessing the intrinsic magnetic fields and developed magnetospheres which interaction with the star wind results in generation of radioemissions (similar to AKR radiation of the terrestrial magnetosphere).

The paper presents a tentative approach to the development of radio facility deployed at Moon's surface, its implementation for search of exoplanets and estimates of their detectability.