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The search of planetary and stellar decameter wavelength radio emissions by the use of the world largest radio telescope

A.A. Konovalenko (1), H.O. Rucker (2), A. Lecacheux (3), Ph. Zarka (3), J.-M. Griessmeier (3), V.N. Melnik (1), G.V. Litvinenko (1), E.P. Abranin (1), V.L. Kolyadin (1), V.V. Zakharenko(1), M. A. Sidorchuk (1), A.I. Brazhenko (1), M. Leitzinger (4), P. Odert (4), A. Hanslmeir (4), M. Khodachenko (2), H. Lammer(2)

(1) Institute of Radio Astronomy, Kharkov, Ukraine, (2) Space Research Institute, Graz, Austria, (3) Observatoire de Meudon, Meudon, France, (4) Graz University, Austria
(akonov@ri.kharkov.ua / Fax: +380 577 061415 / Phone: +380 577 06 1412)

The studies of the non-thermal radio emission of the magnetized objects (the Sun, planets, exoplanets, active stars, etc.) are the important field of low-frequency radio astronomy and astrophysics. The existing largest instruments (first, the Ukrainian decameter radio telescopes UTR-2, URAN) give the good possibilities for studying the planetary and stellar decameter wavelength radio emissions. Huge effective area of UTR-2 radio telescope, broadband, high dynamic range, the electronic steering and multi-beam ON-OFF method implementation allow reaching the sensitivity less than 1Jy, high time and frequency resolution and reliable detection of weak sporadic low-frequency radio emission events. Here we present the main results of the studies of the corresponding objects.