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Radio decameter observations of AD Leonis

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AD Leonis is known to be an active flaring star of spectral type M4.5 Ve. The world's largest decamter array, the UTR-2 near Kharkov/Ukraine of the Ukrainian Academy of Scienecs, was monitoring this star for ten nights during February of this year. A Digital Spectro Polarimeter (DSP) was used as back-end facility giving the possibility of investigating dynamic spectra. These spectra are very useful when searching for decameter radio type II bursts, which show a slow frequency drift with time and are known to be correlated with Coronal Mass Ejections (CMEs) on the sun. Since the drift in frequency is correlated with the density of the material through which the shock wave propagates, we can use this also as a proxy for e.g. density changes for stellar wind investigations. We are able to discriminate between stellar and artificial emission using the instrument's multibeam capability. Also averaging techniques are applied to make possible bursts detectable. The main intention is the search for stellar analogues of the solar type II bursts as signatures of CMEs, but also for periodic structures. Preliminary results are presented.