GAm at the plasma periphery of the T-10 tokamak [[1]](#footnote-1)\*)

DOI: 10.34854/ICPAF.2022.49.1.041

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Zonal flows and geodesic acoustic modes (GAMs) as their high-frequency counterpart influence transport processes in tokamak plasmas through interacting with broadband turbulence [1]. GAM in T-10 tokamak plasmas has three frequency peaks: low frequency (LF) satellite, main peak and high frequency (HF) satellite [2]. Each peak interacts with individual frequensy diapason of broadband turbulense with three-wave mechanism [3]. It is known, that in T-10 tokamak plasmas periphery (ρ > 0.87) main peak amplitude lowers to the noise level [4].

The present research is focused on studying of frequency structure of GAM on the periphery (ρ ~ 0.9) of the plasmas using spectral and bicoherent analysis of data, received from heavy ion beam probe [5] in the regime (Ipl = 230 kA, Bt = 2.3 T, ne ~ 0.6‑0.7∙1019 m-3. Figure 1 shows comparison of spectrums of plasma potential oscillations, measured at different radiuses.

The current research states that at the plasma periphery of the T-10 tokamak LF-satellite can be observed separately from main peak and HF-satellite.

The work is supported by RSF, project 19-12-00312

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