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VLF/ELF Remote Sensing of Ionospheres & Magnetospheres



## **Some Results of Theoretical Study on Quasiperiodic VLF Emissions**

P.A. Bespalov<sup>1\*</sup>

<sup>1</sup> Institute of Applied Physics, Russian Academy of Sciences, Nizhny Novgorod, Russia

\*Corresponding Author: peter@appl.sci-nnov.ru

A formalism describing comparatively slow whistler wave spectrum evolution in the planetary electron radiation belts is developed. Some common aspects of the wave spectrum evolution near and far from the steady-state are found. A relationship between wave spectrum evolution in a separate spectral element and the energetic electrons source power and anisotropy in the magnetic flux tube is noted. Many important properties of the quasiperiodic VLF emissions, such as the location of the excitation region, frequency band, repetition periods, connection with magnetic pulsations, temporary wave spectrum evolution, accumulation and precipitation of particles are explained.