

PROPAGATION OF PARTICLE BEAMS IN SOLAR CORONAL MAGNETIC FIELD STRUCTURES

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Abstract

A combination of high time resolution radio spectrographic and imaging data in the meter wave range allows for analyzing the structure of magnetic fields in the solar corona due to its "illumination" by particle beams injected during small scale energy release processes. The analysis confirms the presence of electron acceleration sites in different heights of the corona and gives insight into the evolution of particle beams during its propagation in closed magnetic field structures. The results can have some relevance for planetary radio phenomena, too.

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