

SEISMOLOGY OF OPEN AND CLOSED CORONAL MAGNETIC STRUCTURES

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Magnetohydrodynamic waves and oscillations are natural tools for the diagnostics of the plasma structures which support them. The review presents current trends in the MHD coronal seismology, its recent achievements and future challenges, covering kink, sausage and longitudinal modes of closed coronal structures, and propagating fast wave trains and longitudinal waves in polar plumes and long loops. The seismological techniques for the estimation of the absolute value of the coronal magnetic field, sub-resolution structuring, density stratification and the possible determination of the coronal heating function are discussed.