MHD Seismology of Large and Small Scale Solar Structures by Observed Wave Harmonics

A.K. Srivastava

Aryabhatta Research Institute of Observational Sciences (ARIES), Manora Peak, Nainital, India

The observations of the harmonics of various MHD oscillation modes (e.g., acoustic, sausage, kink) in large-scale (e.g., loops) and small-scale (e.g., networks, bright points) magnetic structures of the solar atmosphere, are being very important to derive crucial plasma conditions of these solar structures to understand their dynamics and heating. In the present paper, I review the recent trends of MHD seismology based on the observations of wave harmonics in the solar atmosphere, and discuss their implications and future aspects.