

WAVES AND OSCILLATIONS IN SOLAR AND STELLAR INTERIORS - DYNAMO WAVES

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The analysis of acoustic wave properties is the primary way to probe stellar interiors and search for clues to the physical basis of stellar magnetism. For the solar case, helioseismology has revealed several aspects important for dynamo theory, such as the existence of the tachocline, the penetration of the torsional oscillation through the convection zone, and properties of the meridional flow. Local helioseismology is also used to probe the subsurface structure and dynamics of active regions, image sunspots on the solar farside, and map flows in the convection zone. With the advent of asteroseismology, which is now able to reliably detect solar-like oscillations in distant stars, we should be able to obtain further clues about the dynamo mechanism across the HR diagram. In this presentation, the latest relevant results in helio- and asteroseismology will be discussed.