

## Sun, Space Weather, and Solar-Stellar Connection



Contribution ID: 199

Type: **Invited review talk**

## Solar Cycle Variations in the Solar Interior

*Monday, January 20, 2025 4:15 PM (25 minutes)*

Using the helioseismic data for the last nearly 30 years from GONG, MDI and HMI instruments it is possible to study the solar cycle variations in structure and dynamics. Variations in frequencies are found to be correlated to solar activity and the inversion of these frequency differences, shows that the variation is confined to near surface region and is generally attributed to variation in the solar magnetic field. The solar rotation shows a distinct pattern of variation with solar cycle and this is referred to as the zonal flows. These results will be discussed.

### Contribution Type

Invited talk

### Theme

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**Session Classification:** Solar Cycle Variations in the Interior