

**NEW EYES TO SEE INSIDE THE SUN AND STARS
PUSHING THE LIMITS OF HELIO- AND ASTEROSEISMOLOGY
WITH NEW OBSERVATIONS FROM THE GROUND
AND FROM SPACE**

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The continuing success of helio- and asteroseismology in studying the internal structure and dynamics of the Sun, and of other single stars, has been highlighted in recent years by many topical meetings. The present Proceedings document the first Seismology symposium ever held in conjunction with an IAU General Assembly. This substantially influenced the layout of the scientific programme and demonstrates the vitality of this field of astronomy.

The invited reviews are intended to address an audience that includes many non-specialists. Therefore, this volume is particularly valuable as an introduction to the general concepts of the field, and for conveying the excitement that comes with discussions of the most recent observational and theoretical results. There are two chapters on the many facets of asteroseismology, which also compare solar and stellar achievements.

A major focus of the symposium were the new developments resulting from the observations of unprecedented quality obtained from global multi-site networks, and especially from the Solar and Heliospheric Observatory SoHO, currently continuing its observations from the Lagrangian point L_1 . From the center of the Sun to its outer layers, the reader will learn how modern diagnostic techniques reveal the inextricable links between the complex structure of the interior and atmosphere of our nearest star.

The book is recommended for undergraduates, postgraduates, and professionals with a strong interest in modern developments in astrophysics.

Coverpicture:

Contour plot of solar rotation from 144 days of MDI medium- ℓ data (adapted from Schou et al., 1998; see also article by Schou et al., pg. 141, these proceedings).

