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Bio

ACADEMIC APPOINTMENTS

- Physical Science Research Scientist, Hansen Experimental Physics Laboratory (HEPL)

Publications

PUBLICATIONS

- **Structure and Dynamics of the Sun's Interior Revealed by the Helioseismic and Magnetic Imager** *SOLAR PHYSICS*
  Kosovichev, A. G., Basu, S., Bekki, Y., Buitrago-Casas, J., Chatzistergos, T., Chen, R., Christensen-Dalsgaard, J., Donea, A., Fleck, B., Fournier, D., Garcia, R. A., Getling, A. V., Gizon, et al
  2025; 300 (5)

- **Ensemble Kalman Filter Data Assimilation into the Surface Flux Transport Model to Infer Surface Flows: An Observing System Simulation Experiment** *ASTROPHYSICAL JOURNAL*
  Dash, S., Derosa, M. L., Dikpati, M., Sun, X., Mahajan, S. S., Liu, Y., Hoeksema, J.
  2024; 975 (2)

- **The Sun's Large-Scale Flows I: Measurements of Differential Rotation & Torsional Oscillation** *SOLAR PHYSICS*
  Mahajan, S. S., Upton, L. A., Antia, H. M., Basu, S., Derosa, M. L., Webber, S., Hoeksema, J., Jain, K., Komm, R. W., Larson, T., Nagovitsyn, Y. A., Pevtsov, A. A., Roudier, et al
  2024; 299 (3)

- **Impact of Anomalous Active Regions on the Large-scale Magnetic Field of the Sun** *ASTROPHYSICAL JOURNAL*
  Pal, S., Bhowmik, P., Mahajan, S. S., Nandy, D.
  2023; 953 (1)

- **Removal of Active Region Inflows Reveals a Weak Solar Cycle Scale Trend in the Near-surface Meridional Flow** *ASTROPHYSICAL JOURNAL*
  Mahajan, S. S., Sun, X., Zhao, J.
  2023; 950 (1)

- **Variations in differential rotation and meridional flow within the Sun's surface shear layer 1996-2022** *FRONTIERS IN ASTRONOMY AND SPACE SCIENCES*
  Hathaway, D. H., Upton, L. A., Mahajan, S. S.
  2022; 9

- **Improved Measurements of the Sun's Meridional Flow and Torsional Oscillation from Correlation Tracking on MDI and HMI Magnetograms** *ASTROPHYSICAL JOURNAL*
  Mahajan, S. S., Hathaway, D. H., Munoz-Jaramillo, A., Martens, P. C.
  2021; 917 (2)