

## **Magnetic Flux Density in the Inner and Outer Heliosphere**

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The flux density (the normalized radial component) of the heliospheric magnetic field (HMF) has recently been estimated in different methods. Using the modulus of the radial HMF component when calculating the average flux makes the flux values increase with distance, a situation now called the flux excess problem. This is mainly due to the field fluctuations whose relative significance increases for weak fields of the far heliosphere. The flux excess problem can be largely avoided by assuming that the HMF is oriented along the Parker spiral and by removing the perpendicular fluctuations. Thereafter the fluxes observed by different probes at different radial or latitudinal locations are in a good agreement. Naturally, fluctuations along the spiral remain but have only a minor effect on flux variation. We also study the fluctuations in more detail and find that the dominant period of fluctuations varies with solar cycle phase and is different in fast and slow solar wind.