# Helicity and magnetic field structure

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Magnetic helicity is an ideal MHD invariant; it measures geometric and topological properties of a magnetic field. The talk will review helicity and its mathematical properties. It can be decomposed in several ways (for example, self and mutual helicity, Fourier spectra, linking, twist, and writhe). The talk will also review methods of measuring the helicity flux, with applications in solar and space physics. Some recent absolute measures of helicity in simply connected volumes will be covered.