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The Real Winding Number of Coronal Flux Ropes

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Twist is routinely used to quantify the location of flux ropes and to understand their evolution. At the Sun, we rely on the quantity T_w that describes how much two infinitesimally close field lines wind about each other due to its simple derivation from parallel current. In this work we present a simple method for the identification of a flux rope axis and the calculation of the winding number for its field lines. The behaviour of this metric is explored in comparison to T_w .

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