

This paper starts with a solid introduction to braids with definitions, figures, etc. It then defines the Artin braid group in terms of braid diagrams, then gives a simple presentation of the Artin braid group using generators and relations. The paper explains the connection between links and braids, stating Alexander's Theorem and Markov's Theorem. Readers interested in the proofs are directed to other sources. The paper finishes by introducing the Temperley-Lieb algebra and deriving from it the Jones polynomial. The author provides a great deal of intuition and this is a great survey for anyone wanting to learn more about braids.