

An Introduction to Legendrian Knot Theory

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Legendrian Knot Theory is a branch of Contact Topology, a very active area of research with applications to fields such as optics, classical mechanics, and low dimensional topology. As with classical knot theory, much work has been done to classify Legendrian knots; however, the restrictions imposed on these knots by a contact structure leads to surprising results. In this talk we will cover the basic definitions of Contact Topology, work through the classical invariants of Legendrian Knot Theory, and explore new invariants arising from the theory of generating families.